THE MSL

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The Incorporation of the Medical Science Liaison Into the Virtual Advisory Board Process Leads to Optimal Expertise Exchange

From Idea to Execution: How a Medical Affairs Field Request Launched an Impactful Resource

Positioning Yourself to Become a Medical Science Liaison in 2022 and Beyond

The Rise of the Real-Time MSL

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Pearls of Wisdom for Overcoming Challenges as an MSL

Chasing the Elusive Field Medical Affairs Impact Metric

Benchmarking the Cultural Emotional Index in Medical Affairs

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Winning MSL of the Year Award

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Letter From Editor

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Letter from the Editor

July 2022

Hello Fellow Medical Affairs Colleagues!

The next MSL Society annual conference is nearly here and it's a BIG one with the 10th Anniversary program! Get ready for an incredible conference with great networking and learning in Vegas!

I hope everyone is enjoying the summer months whether it's hot beach weather or cold in the southern hemisphere! Moving out west at the start of the pandemic certainly has been a big change for me and my family, yet many changes have been surprisingly wonderful, such as more time outdoors to hike, explore beautiful national parks and enjoy the pacific coast beaches! In all times of change, it's important to look for the good that comes in small and big ways. As we move back to more in-person meetings again in the face of the recent pandemic, change is constant and we stay vigilant in the event covid or other public health concerns arise. All of these needs impact us as individuals, family members, employees, and with those we engage such as clinicians, researchers, and organizations.

Rising above challenges, being adaptable, flexible, and seeking novel ways to manage change is part of our core field medical and leadership capabilities. Medical Affairs is evolving and the skills of today will need to adjust and adapt to the needs of tomorrow. Some areas to consider include expanding focus on health equity and the field medical role to support areas that are underserved; we always keep patients front and center in what we do to improve patient outcomes. Digital everything is all around us from novel apps and platforms to more focus on data analytics and operational needs to assess what we deliver to our organizations, the impact, and value as well as how we can leverage those areas. We all experience a faster pace with more information coming to us, higher expectations to act on the information we receive, and doing everything more rapidly; it goes without saying that quality needs to come before speed; we cannot neglect the need to assure what and how we deliver value is the best we can bring to our KOLs and stakeholders. There has been a growing demand for field medical affairs and leaders who are ready for the challenges today and poised to meet the demands of this role as we move into the future! Keep growing and do not stop investing in your development to maintain your competitive edge! Don't forget to pay it forward when it comes to mentoring and helping others in your profession grow, as well.

I hope that the variety of articles in this edition will give everyone more food for thought to consider how your skills need to expand and grow with new ideas, enhanced competencies, and unique approaches to consider in your current role. This edition spans topics from tips for those aspiring to enter the MSL role and how covid has forever shaped the field of medical role to focus on AI for insights, meeting needs in real-time, and how to stay up to date with drug development discovery. The theme for this edition is Medical Affairs Excellence and I am thrilled to share this content with all of you, representing a global medical affairs community that takes time to share best practices, novel ideas, and ways to enhance how we all deliver value! This gift the authors give to our professional community represents excellence at the heart of the meaning: we are here to serve and we do this in so many ways from serving our organization, patients, colleagues, and community.

Cheers to everyone and best wishes for good health!

Cherie

Editor:

Cherie Hyder, PharmD, MSL-BC

Cherie Hyder is Syndicated National MSL Director at Syneos Health. In her previous job at Biohaven Pharmaceuticals she supported a virtual launch of Nurtec ODT for acute migraine. She has been involved in drug development for more than 30 years, working at FDA in CDER and pharmaceutical companies including Pfizer, Lilly, Novartis, Solvay, and Avanir, among others. At University of Missouri, she received a Doctor of Pharmacy degree with the intention to devote her career to pharmaceutical research. She has multiple adjunct faculty appointments and enjoys teaching opportunities.

New Medical Science Liaison Onboarding Training: Perspectives of Participants and Facilitators

July 2022

Onboarding and training Medical Science Liaisons (MSLs) can be stressful, time-consuming, and expensive. Many companies do not have the internal resources or the adequate time needed to fully onboard new MSLs. In fact, in a global survey, 72% of MSLs revealed that their initial onboard training consisted of only being given a set of journal articles related to the product or disease state for at-home self-study!

Over the last several years, with the input of numerous MSL leaders, the Medical Science Liaison Society developed and recently launched a new, fully IACET accredited, comprehensive training program to address the need for onboarding newly hired MSLs. The 3-part onboarding program consists of:

- Part 1 – Live Training
  The program begins with a 5-day in-person training facilitated by multiple current MSL managers and Medical Affairs leaders. Participants will learn the essential soft skills needed to be successful and will be provided with comprehensive workbooks and relevant templates related to the topics covered.
- Part 2 – Virtual Training
  All participants are provided 1 year of access to 16 eLearning courses consisting of 35+ hours of foundational knowledge relevant to MSLs and others in Medical Affairs. Each course includes assessment questions throughout the course and a final assessment at the end to ensure information is retained.
- Part 3 – Continuous Growth
  All participants receive a 1-year *professional level* membership to the MSL Society which provides access to more than 225 original research reports, expert webinar recordings; 1-year enrollment in the MSL Mentor Program, and waived fees for the MSL certification (MSL-BC).

The pilot program for the 5-day live portion was conducted April 25th – 29th, 2022 in Ft. Lauderdale, Florida, and included MSLs from 3 countries and 7 companies. Several of the participants and facilitators shared their perspectives regarding the new MSL onboarding program.

How does this Onboarding Training Program help increase the value of an MSL?

"MSLs are often required to onboard rapidly, demonstrating value back to the organization from day 1, yet many organizations focus on therapeutic training for the bulk of their onboarding program. Many times, this is a result of limited time and resources. Further, new teams or new team members are more often composed of first-time MSLs or MSLs with indirect experience.

Given the complexity and continuous evolution of the MSL role, new MSLs need additional foundational training to facilitate their understanding of how to begin executing their role at the beginning of a new position. These foundational skills include understanding the regulatory framework for MSLs, the basics of communication and insights gathering skills and breaking down the structure of a medical strategy with an overview of clinical research and publication fundamentals.

Additionally, the MSLS Onboarding training program offers deep content that will allow new MSLs to quickly build universal transferable competencies in areas highly relevant to the core MSL function which are gaining access to KOLs and maximize planning and time with them to deliver greater value through expanded analysis of scientific literature and gathering actionable and impactful medical insights. A broad array of topics are covered in this week-long extensive training program which will enhance the ability of new MSLs to confidently begin their MSL career."

Facilitator
Cherie Hyder, PharmD, MSL-BC
Syndicated National MSL Director, **Syneos Health**

Facilitator
Linda Traylor, PhD, MSL-BC
Senior Principal, Medical Affairs, **IQVIA**

"The training provided me with context and clarity that I don't think I otherwise would have received until after several months of experience in the MSL role. It also provided me with a few tools that I have immediately begun to use, which also would have taken me months, if not years of experience to develop on my own. In many ways I feel that the training has accelerated my development in the MSL role, allowing me to contribute more value to my team and external partners more quickly."

Participant
Andrew J. Rennekamp, PhD
Medical Science Liaison, **Seqirus**

"The onboarding training program aims to give new MSLs a strong foundation of knowledge that can be applied to a plethora of MSL positions whether in big pharma, device, or diagnostics. This foundation is integral as many new MSLs will not know how to translate their talents into what is needed from an MSL at first. But, once the foundation is set the MSL can tailor what they have learned to their specific role and continue to grow within it. So, the Onboarding Training Program serves as a great way for MSLs to exponentially increase their value when they apply the foundational knowledge to their specific role."

Participant
Brandon Young, PhD
Medical Science Liaison, **Seqirus**

"This Onboarding Training Program was incredibly useful for me as a new MSL! I learned so much about how to gather actionable insights, prepare for big congresses, develop good relationships with KOLs and evaluate a paper in depth. The only thing I wish is that I did this sooner because I have been an MSL for 8 months. Every new MSL should complete this course in their first few months!"

Participant
Dawn O Reilly, PhD, MMS, PA-C
Medical Science Liaison**, Biodesix**

How will this Onboarding Training Program increase the value of an MSL for the KOLs they support?

The landscape of KOL engagement has transformed in the last few years and KOLs have less time to meet with MSLs and there are greater numbers of MSLs trying to get their time. Knowing this, MSLs must be more strategic with planning for KOL engagement and in how they maximize time spent with them to focus on delivering value, particularly with regard to enhancing patient care outcomes.

The onboarding program addresses multiple aspects of KOL access challenges and provides tools to increase opportunities to engage. These include basics like writing optimal introductory email meeting requests, planning for strategic engagement with value-based data-driven agendas, and identifying key areas that KOLs expect MSLs to focus on when meeting with them. Attending the training program enhances MSL strategic focus on value-added areas with KOL engagement.

Facilitator
Cherie Hyder, PharmD, MSL-BC
Syndicated National MSL Director, **Syneos Health**

Facilitator
Linda Traylor, PhD, MSL-BC
Senior Principal, Medical Affairs, **IQVIA**

How do you think it helped that you and your colleagues are attending the same onboarding program?

"Attending with colleagues made the training more enjoyable for me. I got to know them better and actually see them in person. It was also nice to be able to discuss with them some of the unique aspects of our company that differ from standard norms, and how we might apply the things we were learning to our specific company's context."

Participant
Andrew J. Rennekamp, PhD
Medical Science Liaison, **Seqirus**

"Attending the Onboarding training with some of my coworkers was very helpful. We all were able to take different bits and pieces from the training and then reconvene at the end of the day to brainstorm how we could implement new strategies for our own company. I think having multiple eyes from the same company on the training is important because we all will have new and different ideas of how to use the training."

Participant
Brandon Young, PhD
Medical Science Liaison, **Seqirus**

"I attended this program with my team. It was awesome! We were able to bond during it and align together with the trainings that we learned. We were able to discuss our own situations in our company and by utilizing the tips and knowledge shared with us from this Onboarding training, we could move forward. It was extremely helpful having us all there."

Participant
Dawn O Reilly, PhD, MMS, PA-C
Medical Science Liaison**, Biodesix**

How did the facilitators help create a conductive learning environment for you to improve your skills as an MSL?

"I really enjoyed our instructors. They did their best to answer our questions even when they were far-fetched hypothetical scenarios. Every instructor was patient and was willing to adjust their teachings to the class's pace. We spent more time on things like compliance because that is what a lot of the class had questions about."

Participant
Brandon Young, PhD
Medical Science Liaison, **Seqirus**

"We had amazing facilitators. I really enjoyed getting to learn from MSLs that have been in the field for years. I think this was one of the most valuable things that MSL Society brought to the trainings because hearing their personal experiences were very helpful."

Participant
Dawn O Reilly, PhD, MMS, PA-C
Medical Science Liaison**, Biodesix**

How would companies benefit from sending their new hire MSLs to this program?

"Time and resources are the most precious commodities for any organization. The MSLS has built the content of the onboarding

program to focus on foundational, universal, and transferable skills training, allowing organizations to keep their time and resources focused on therapeutic area specific training. MSLs who attend the MSLS Onboarding program benefit from a more highly skilled MSL who can immediately utilize key learning to hone in on strategic objectives in their regions. This is an opportunity for organizations to take advantage of proven MSL skills training, giving their MSLs a significant advantage while maximizing their time and resources.

The MSLs attending this onboarding program leave with tools to continue building these foundational skills as well as a network of professionals that are invested in helping them succeed. Ultimately, MSLs armed with these tools for continuous learning will only strengthen their communication effectiveness allowing them to more confidently execute their new roles."

Facilitator
Cherie Hyder, PharmD, MSL-BC
Syndicated National MSL Director, **Syneos Health**

Facilitator
Linda Traylor, PhD, MSL-BC
Senior Principal, Medical Affairs, **IQVIA**

What do you think will be the long-term benefit of participating in the Onboarding Training Program?

"Organizations who invest early in MSL skills training have a faster onboarding experience for their field teams with the ability to begin delivering value quickly. However, the long-term benefit is rooted in the continuous education component of the MSLS Onboarding program. MSLs graduating from the program leave with a set of tools and a network of professionals that give them an elevated trajectory of the MSL track with a value focus allowing them to advance in their competencies more rapidly and in some cases move ahead with a faster track to higher MSL capabilities, new positions and greater personal job satisfaction which may also translate into MSL retention."

Facilitator
Cherie Hyder, PharmD, MSL-BC
Syndicated National MSL Director, **Syneos Health**

Facilitator
Linda Traylor, PhD, MSL-BC
Senior Principal, Medical Affairs, **IQVIA**

"By implementing best practices and good habits early on, I am laying a firm foundation on which I can build. I also have a good understanding now of what to look for in future MSL candidates that I may hire, and I have a number of ideas for future practices I hope to implement as an MSL manager."

Participant
Andrew J. Rennekamp, PhD
Medical Science Liaison, **Seqirus**

"The strong foundation that the Onboarding Training Program provided will set the stage for my progression as an MSL. Specifically, learning how to interact with commercial colleagues so that our relationships are beneficial to one another, understanding how to create a plan to tackle conferences/congresses, and recognizing what insights are most important when speaking with a KOL. These pieces of training stood out to me the most and I believe will be the most beneficial to my future career."

Participant
Brandon Young, PhD
Medical Science Liaison, **Seqirus**

"There are so many long-term benefits to training a new MSL through this Onboarding program! After this training, the new MSL can hit the ground running and understand the important things about being an MSL. All of the resources provided as follow-up and the live trainings provided are extremely valuable. Further, its so valuable to have all of the team aligned and understand fully the important parts of being an MSL and this Onboarding training does that for you. I have no doubt that when a company invests in this training for their new MSLs, it will pay off in the long run."

Participant

Dawn O Reilly, PhD, MMS, PA-C
Medical Science Liaison**, Biodesix**

How would MSL leaders benefit from sending their new hire MSLs to this program?

"MSL leaders are tasked with assuring their teams are field ready and able to deliver value in alignment with core medical objectives as soon as possible in their new MSL roles. These leaders know that MSLs only get one chance to make a first impression with KOLs; being ready to deliver value to KOLs and the organization involves very specific knowledge and understanding of the MSL role in a way that allows them to execute in the field on day 1.

MSL leaders are less likely to need to coach and train new MSLs following investment in the MSLS Onboarding program. MSLS Onboarding graduates have a smoother transition into the new MSL role because they receive industry-focused training that some MSL leaders may not have time or be prepared to develop and deliver. Lastly, MSL leaders who outsource basic MSL training to a program like the MSLS Onboarding program have confidence in the field readiness of their team."

Facilitator
Cherie Hyder, PharmD, MSL-BC
Syndicated National MSL Director, **Syneos Health**

Facilitator
Linda Traylor, PhD, MSL-BC
Senior Principal, Medical Affairs, **IQVIA**

Author:

Dr. Samuel Dyer

CEO and Chairman of the Board

Dr. Samuel Dyer has over 22 years of experience within the International MSL community while working for a number of top global companies. During his career, he has led MSL / Medical Teams in multiple TA's in over 60 countries throughout the U.S., Canada, Europe, Africa, Middle East, Australia, and Asia.

His management experience includes small (2+) to large (240+) MSL teams across multiple TA's. Throughout his career, Dr. Dyer has worked on MSL and Medical Affairs strategy and has extensive experience in creating strategic MSL utilization and medical communication plans. He has designed and created global MSL training programs that have included: onboarding programs, KOL Medical communication plans, strategic assessments, planning, and execution in geographical locations with diverse cultures /languages. Dr. Dyer has successfully launched both pharmaceutical and medical device MSL teams both in the U.S. and internationally.

Dr. Dyer has also written extensively on the Medical Science Liaison role, including numerous published articles, benchmark studies, and reports. Dr. Dyer is well recognized within the global MSL community and has developed an extensive international network within the Pharmaceutical, CRO, Medical Device, and Biotechnology industries. He is the owner of the largest group on LinkedIn for MSLs and Medical Affairs with over 25,000 members. He has spoken and moderated several international conferences on various MSL topics including KOL management, creating MSL teams, MSL training, international MSL teams, and the value of the MSL role and Medical Affairs. Dr. Dyer is consistently sought out as a resource and consultant for MSL projects that have included diverse companies such as McKinsey Consulting, Bain and Co., and Philips Healthcare.

Dr. Dyer has a Ph.D. in Health Sciences and did medical training in Chicago. He has a Master's Degree in Tropical Biology (where he studied in the Amazon) and has a B.S. in Biology. 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 Amazon #1 Best Seller "The Medical Science Liaison Career Guide: How to Break into Your First Role" (www.themslbook.com) which is the first book published on how to break into the MSL role.

Achieving Effective KOL Engagement and Intelligence Gathering During Medical Conferences

July 2022

Attending medical conferences and intelligence gathering are important activities for most Medical Science Liaisons (MSLs). In fact, a recent global survey conducted by the Medical Science Liaison Society (MSL Society) found that globally 97% of MSLs attend medical conferences while 85% participate in gathering insights (1).

Historically, intelligence gathering and deepening KOL relationships have been two of the primary benefits of attending Medical conferences. However, over the last few years, as a result of the COVID-19 pandemic, it became necessary to attend medical conferences primarily virtually which made it more difficult for MSLs to engage with KOLs during medical conferences effectively.

Many medical conferences have now resumed in-person attendance, and as a result, MSL and Medical Affairs teams are beginning to strategize and attend medical conferences in-person again. The MSL Society recently conducted a global survey to gain a better understanding of the current practices and challenges encountered when planning for and attending medical conferences for the purpose of trying to achieve effective KOL engagement and intelligence gathering during medical conferences. The following data includes insights that have never been available before this survey.

SURVEY METHODOLOGY

A global survey was conducted from May 6th – 26th, 2022, and only completed surveys were included in the data analysis. Respondents were only allowed to participate one time, and duplicate surveys from a single email address were not accepted. The survey results were not weighted. The survey included responses from 739 individuals from 58 countries. However, only responses from individuals that identified their current role as 1. MSL, Sr. MSL, Medical Advisor (or equivalent title) OR 2. Manager / Director of MSLs (or equivalent title) are included in the data presented in this article. These two combined roles resulted in a total of 501 individuals from 47 countries analyzed in the tables below. Respondents were invited to participate in the survey through:

- Announcements in the "Medical Science Liaison & Medical Affairs Networkers" LinkedIn group
- The MSL Society newsletter
- Various LinkedIn posts

COMPANY DEMOGRAPHICS

There was almost equal distribution amongst MSL professionals from pharmaceutical companies which represented the majority of respondents. In fact, 81% of MSLs and MSL Managers in the global survey work at a small, medium, or large pharmaceutical/biotechnology company. The remainder of MSLs and Managers work for medical device, diagnostic companies,

contract MSL organizations, contract research organizations, and other companies.

How would you classify your company?

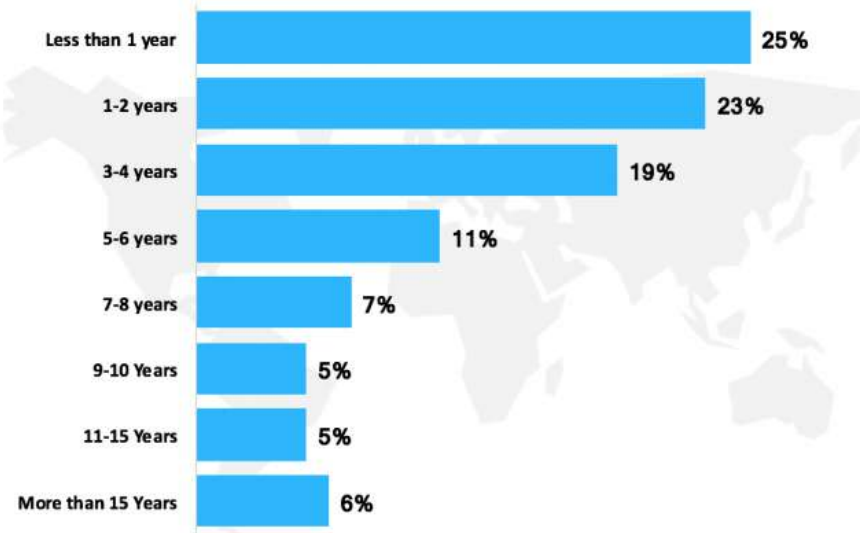
501 Manager / Director of MSLs (or equivalent title) and MSL, Sr. MSL, Medical Advisor (or equivalent title)
Global Data

YEARS OF MSL/MSL MANAGEMENT EXPERIENCE

Interestingly, 48% of MSLs and Managers represented in this survey have two years or less of experience and as a result, may never have attended a medical conference in person due to the COVID-19 pandemic. The remaining 52% of MSLs and Managers have three or more years of experience which likely includes those that have attended in-person medical conferences prior to the pandemic.

How many years of MSL/MSL management experience do you have?

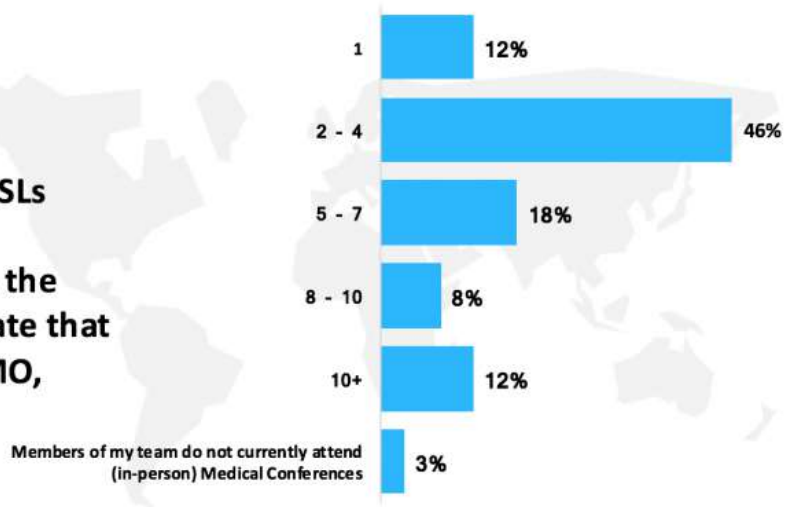
488 Manager / Director of MSLs (or equivalent title) and MSL, Sr. MSL, Medical Advisor (or equivalent title)
Global Data



NUMBER OF MSL ATTENDEES

An important aspect of conference attendance strategy is determining the number of MSLs needed to adequately cover the relevant sessions throughout the conference, coverage of the medical affairs booth, etc. For the majority of teams, the number of MSLs attending medical conferences in person is relatively small. In fact, 58% of MSLs and Managers reported that their team sends 1-4 MSLs in-person to the major medical conferences in the therapeutic area they support. Interestingly, 3% of MSLs and MSL leaders revealed that their company does not currently send any MSLs in person to medical conferences.

Typically, on average, how many MSLs from your team attend the major (in-person) Medical Conferences in the therapeutic area and/or disease state that the team supports (e.g., ASCO, ESMO, ASH, AAN, AUA)?

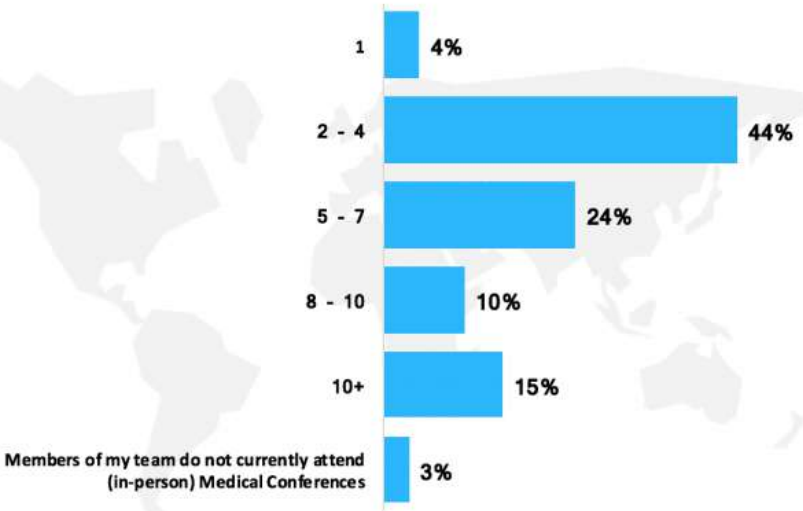


465 Manager / Director of MSLs (or equivalent title) and MSL, Sr. MSL, Medical Advisor (or equivalent title)
Global Data

NUMBER OF CONFERENCES ATTENDED ANNUALLY

The number of medical conferences MSLs attend may be influenced by several factors including the size of the therapeutic area they support, the number of product competitors, where a product is at in its lifecycle, and if new data is being published to support a product, among many other factors. The majority of MSLs and Managers (52%) revealed MSLs on their team attend more than five medical conferences per year including 15% who reported that MSLs attend more than ten medical conferences per year.

Typically, on average, how many (in-person) Medical Conferences do the MSLs from your team attend annually?

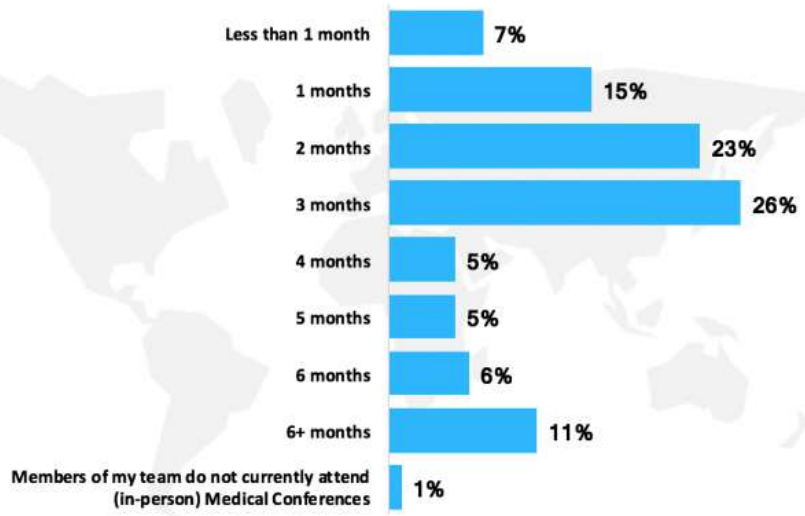


467 Manager / Director of MSLs (or equivalent title) and MSL, Sr. MSL, Medical Advisor (or equivalent title)
Global Data

PLANNING TIME

An important element of effective conference coverage is planning. However, with MSLs attending numerous conferences each year, the time dedicated to planning varies. The survey revealed that about half (49%) of MSLs and Managers begin planning conference coverage 2-3 months before each event. While only 11% of MSLs and Managers reported planning for more than six months before an event.

On average, how early do you begin planning MSL / Medical Affairs coverage for an (in-person) Medical Conference?



456 Manager / Director of MSLs (or equivalent title) and MSL, Sr. MSL, Medical Advisor (or equivalent title)
Global Data

CHALLENGES IN PLANNING AND PREPARING FOR MEDICAL CONFERENCE COVERAGE

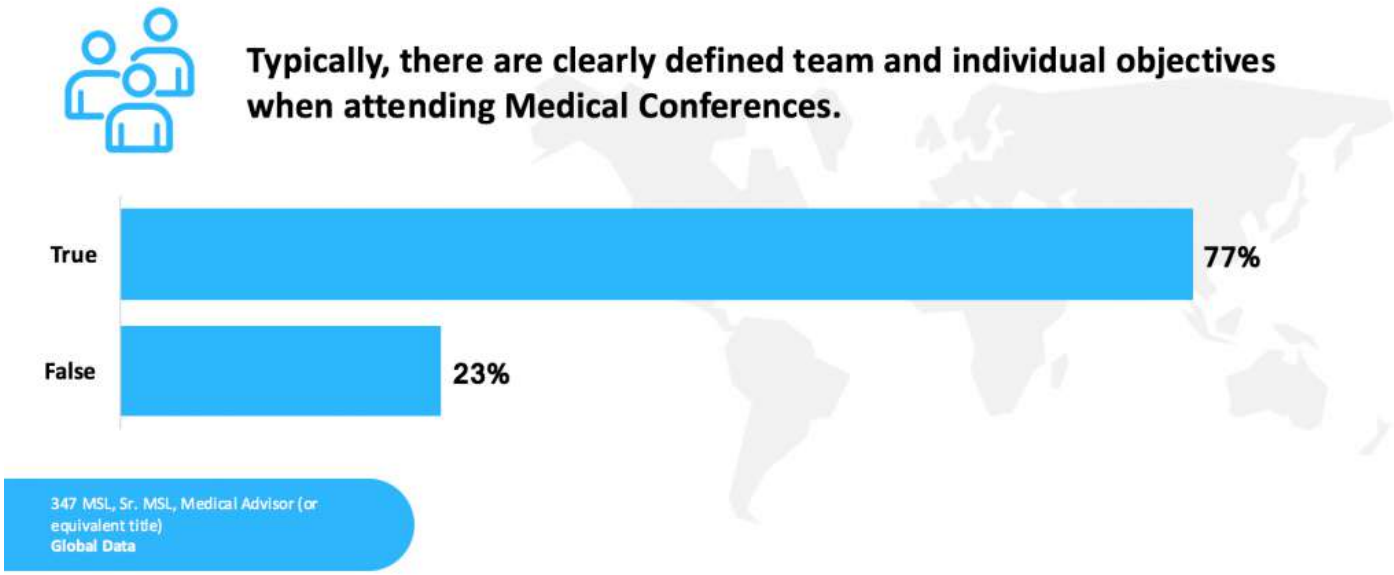
There are numerous challenges in planning and preparing for effective medical conference coverage. In fact, the survey revealed that the two most common challenges when planning and preparing for medical conference coverage were “not having conference agenda early enough / not enough information about agenda topics” (29%) and “understanding the purpose of attending and the objectives of conference coverage” (22%). There were also several other challenges reported including an inadequate number of team members to staff a medical booth, not starting the planning early enough, not coordinating with commercial efforts, and training the field medical team on strategy and relevant new data.

What is YOUR primary challenge when planning and preparing for Medical Conference coverage? (Select one)

397 MSL, Sr. MSL, Medical Advisor (or equivalent title)
Global Data

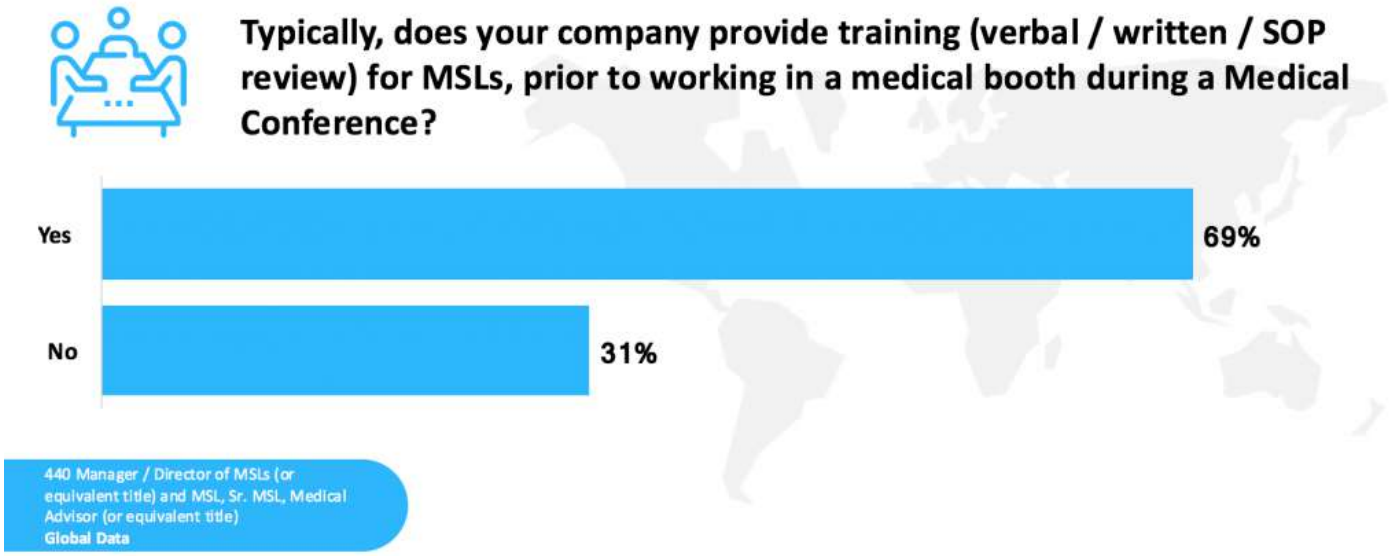
TEAM AND INDIVIDUAL OBJECTIVES

Having clear objectives is an important element of effective conference planning. Although the survey revealed that 77% of MSLs have clearly defined individual and team objectives when attending Medical Conferences, concerningly, 23% also reported they do not have clear objectives.



MEDICAL BOOTH TRAINING

An Important activity for many MSLs while attending Medical Conferences is working in a medical booth. However, 31% of MSLs and Managers reported that their company does not provide MSLs any training prior to working in a medical booth.

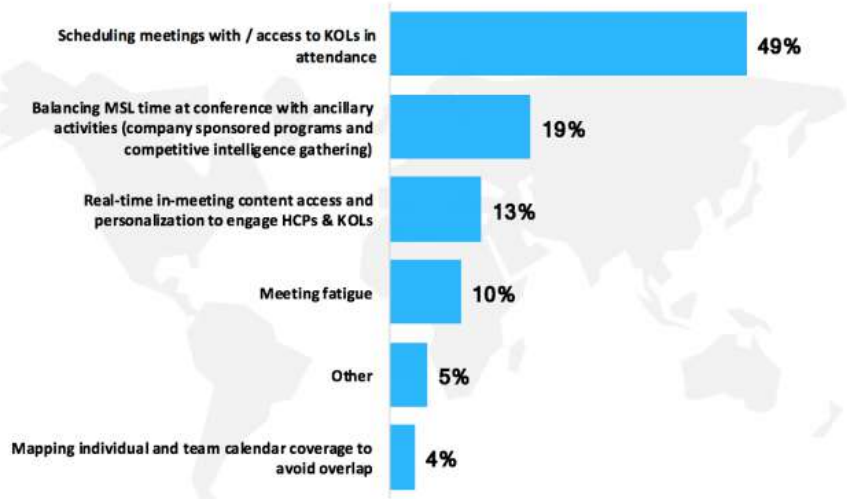


CHALLENGES OF MEETING MANAGEMENT AND KOL ENGAGEMENT

There were several challenges reported by MSLs regarding meeting management and KOL engagement during Medical conferences. One of the goals for attending Medical Conferences should be engaging with and further building value-added relationships with KOLs. However, the primary challenge reported by almost half (49%) of MSLs was “scheduling meetings with / access to KOLs in attendance”.

What is YOUR primary challenge during Medical Conferences regarding meeting management and KOL engagement? (Select one)

395 MSL, Sr. MSL, Medical Advisor (or equivalent title)
Global Data

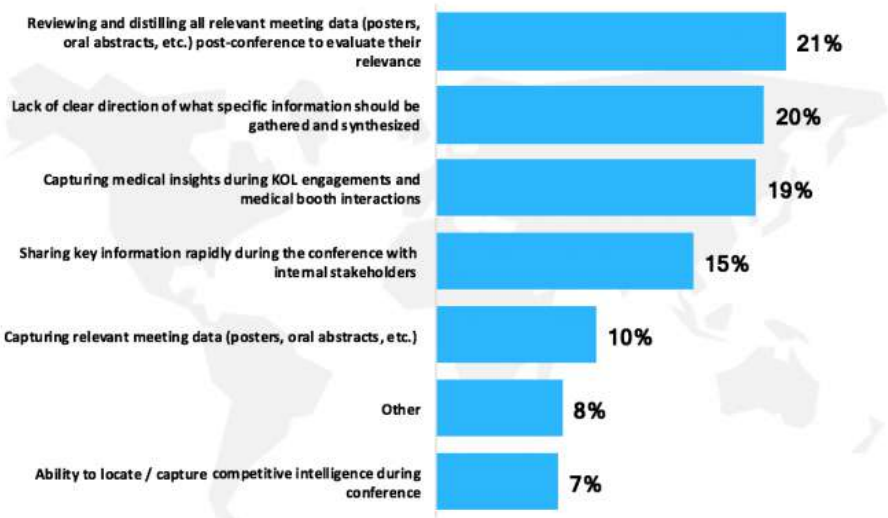


CHALLENGES OF GATHERING AND SYNTHESIZING INTELLIGENCE

One of the goals for attending Medical Conferences typically includes gathering intelligence for the product, the disease state, or the therapeutic area that MSLs support. However, there were also several challenges reported by MSLs regarding gathering and synthesizing intelligence during Medical conferences. The three most common challenges identified by MSLs, which represents the overall majority, were “reviewing and distilling all relevant meeting data post-conference to evaluate their relevance” (21%), a “lack of clear direction of what specific information should be gathered, and synthesized” (20%) and “capturing medical insights during KOL engagements and medical booth interactions” (19%).

What is YOUR primary challenge during Medical Conferences regarding gathering and synthesizing intelligence? (Select one)

395 MSL, Sr. MSL, Medical Advisor (or equivalent title)
Global Data

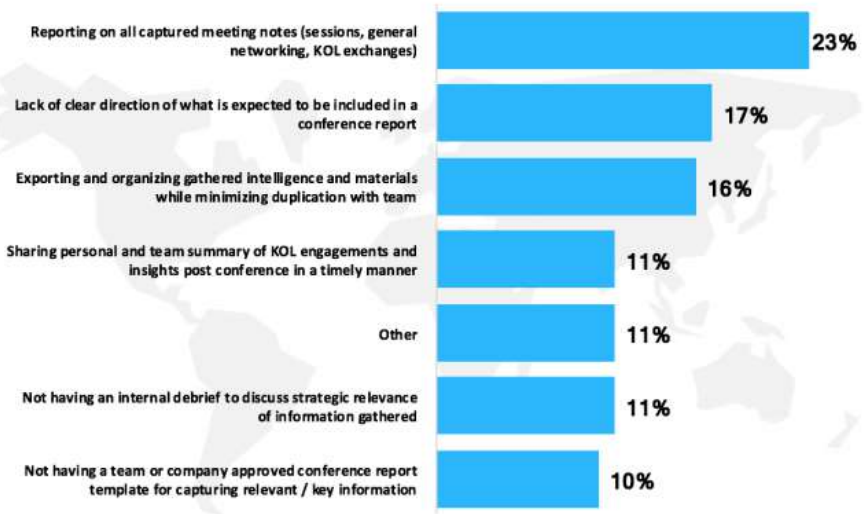


CHALLENGES OF DATA REPORTING AND SHARING

One of the objectives for MSLs attending Medical Conferences should include adding value to their company by reporting and sharing relevant information gained during the conference. However, there were also several challenges revealed by MSLs regarding reporting and sharing data. The majority of MSLs revealed that their primary challenge was “reporting on all captured meeting notes” (23%), a “lack of clear direction of what is expected to be included in a conference report” (17%), or “exporting and organizing gathered intelligence and materials while minimizing duplication with a team” (16%).

What is YOUR primary challenge during Medical Conferences regarding reporting and sharing data? (Select one)

393 MSL, Sr. MSL, Medical Advisor (or equivalent title)
Global Data

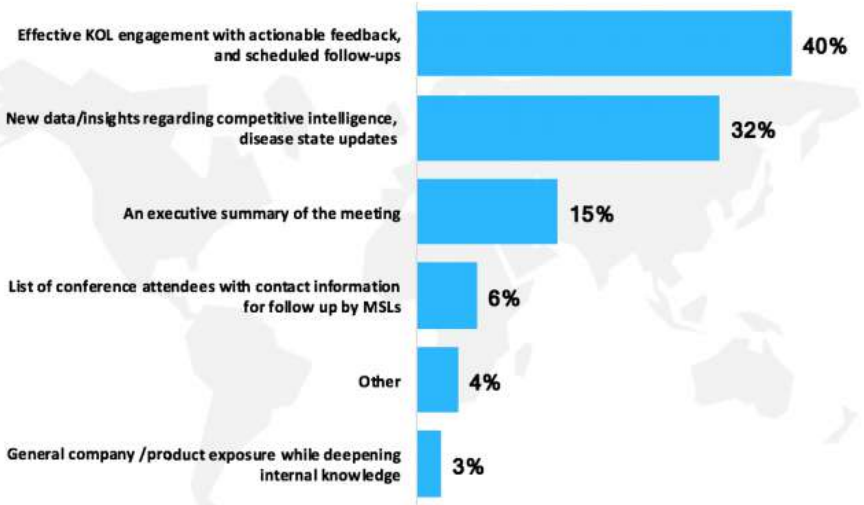


USEFUL OUTPUT OF ATTENDING MEDICAL CONFERENCES

Having clear outcomes is crucial to successful Medical Conference planning. The majority (72%) of MSLs reported that the two most useful outputs from an MSL attending Medical Conferences were “effective KOL engagement with actionable feedback, and scheduled follow-ups” (40%) or “new data/insights regarding competitive intelligence, disease state updates” (32%). Other useful output included a list of conference attendees with contact information for follow-up and general company/product exposure while deepening internal knowledge.

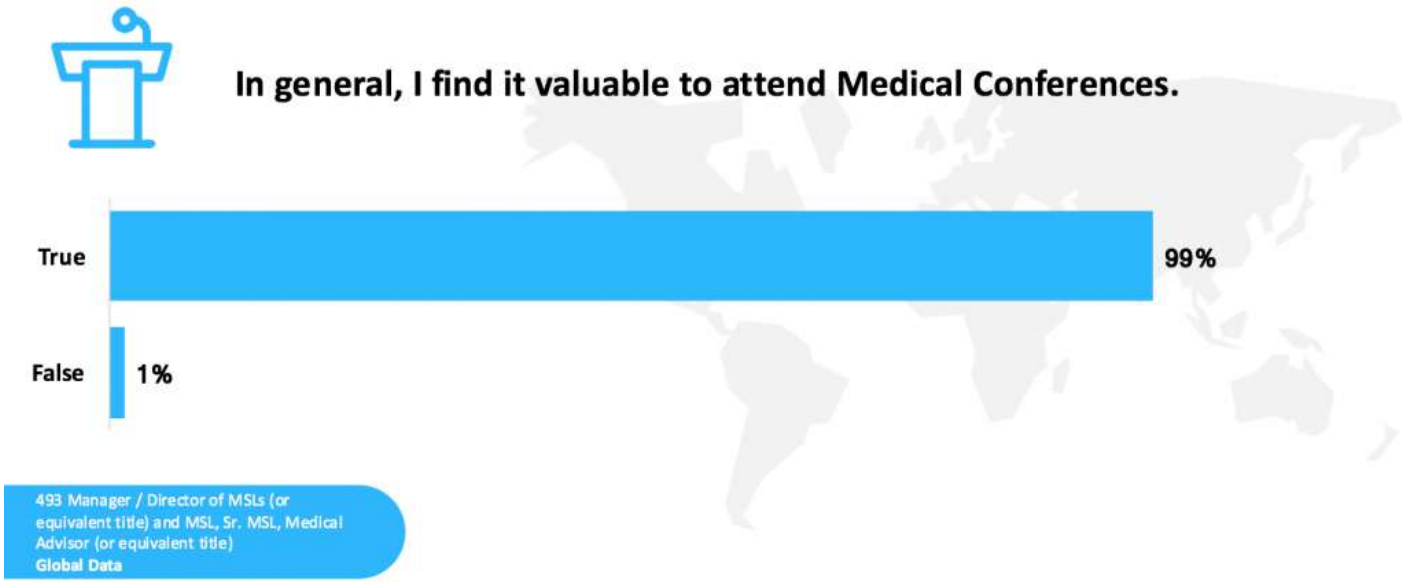
What is the most useful output from an MSL (or team) attending Medical Conferences? (Select one)

395 MSL, Sr. MSL, Medical Advisor (or equivalent title)
Global Data



VALUE OF MEDICAL CONFERENCES

Sending MSLs and others from Medical Affairs to attend an in-person Medical Conference can incur significant costs (e.g. hotel, flights, etc.) so it is crucial to ensure there is the value gained from those attending. It’s encouraging that nearly all MSLs and Managers (99%) in the survey reported that they find it valuable to attend Medical Conferences which may contribute to the success of conference planning and attendance.



CONCLUSION

Medical conferences are valuable for sharing and gathering insights related to the development of products that MSL teams support. Attending medical conferences has historically been an effective method for MSLs, MSL leaders, and others in Medical Affairs to discuss the latest clinical/medical developments for the products they support, gain insights and knowledge, and serve as another venue for engaging in person with KOLs. However, the COVID-19 pandemic disrupted KOL engagement and intelligence gathering during virtual Medical conferences. Two plus years after the beginning of the global pandemic, many medical conferences have resumed in-person attendance, and MSLs and Medical Affairs teams are beginning to plan and attend medical conferences in person again. As a result, the MSL Society recently conducted a global survey to gain a better understanding of the current practices and challenges when planning for and attending medical conferences.

The results of this survey highlight the numerous challenges when planning and strategizing MSL team attendance during Medical conferences. The information gathered from this survey reveals best practices amongst MSLs and Managers regarding conference planning. These insights may be useful in raising awareness and addressing the most common challenges of attending Medical conferences with the ultimate goal of achieving effective KOL engagement and intelligence gathering during Medical Conferences.

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1. Global MSL Salary & Compensation Survey. 2021 MSL Society
2. MSL Activities: Attending Medical Conferences Survey. 2022 MSL Society

Both references are among the more than 225 global surveys conducted and published by the MSL Society. All the surveys and corresponding reports are available to all professional-level members on the website (www.themsls.org).

Author:

Dr. Samuel Dyer

CEO and Chairman of the Board

Dr. Samuel Dyer has over 22 years of experience within the International MSL community while working for a number of top global companies. During his career, he has led MSL / Medical Teams in multiple TA's in over 60 countries throughout the U.S., Canada, Europe, Africa, Middle East, Australia, and Asia.

His management experience includes small (2+) to large (240+) MSL teams across multiple TA's. Throughout his career, Dr. Dyer has worked on MSL and Medical Affairs strategy and has extensive experience in creating strategic MSL utilization and medical communication plans. He has designed and created global MSL training programs that have included: onboarding programs, KOL Medical communication plans, strategic assessments, planning, and execution in geographical locations with diverse cultures /languages. Dr. Dyer has successfully launched both pharmaceutical and medical device MSL teams both in the U.S. and internationally.

Dr. Dyer has also written extensively on the Medical Science Liaison role, including numerous published articles, benchmark studies, and reports. Dr. Dyer is well recognized within the global MSL community and has developed an extensive international network within the Pharmaceutical, CRO, Medical Device, and Biotechnology industries. He is the owner of the largest group on LinkedIn for MSLs and Medical Affairs with over 25,000 members. He has spoken and moderated several international conferences on various MSL topics including KOL management, creating MSL teams, MSL training, international MSL teams, and the value of the MSL role and Medical Affairs. Dr. Dyer is consistently sought out as a resource and consultant for MSL projects that have included diverse companies such as McKinsey Consulting, Bain and Co., and Philips Healthcare.

Dr. Dyer has a Ph.D. in Health Sciences and did medical training in Chicago. He has a Master's Degree in Tropical Biology (where he studied in the Amazon) and has a B.S. in Biology. 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 Amazon #1 Best Seller "The Medical Science Liaison Career Guide: How to Break into Your First Role" (www.themslbook.com) which is the first book published on how to break into the MSL role.

People Leaders Need Development, Too!

July 2022

As medical affairs leaders, we are always thinking about the development needs of our teams, however, in talking with many leaders across organizations, there is consistently very little focus on people leader development needs. As we consider how vital it is to invest in our staff to help them advance their competencies, growth should not end when one moves into leadership.

Recently, I was planning a leadership meeting for our field teams and wanted to include some leader training. As I considered what topics they might be most interested in, I started to lay out a framework for the leader curriculum and reached out to multiple leaders to get input and confirm that the proposed curriculum was comprehensive for the leader needs of those new to leader roles as well as those who had been in leadership for much longer. Ironically, it was after laying out the curriculum that I wanted to ensure it matched people leader capabilities and competencies.

I set off to work on a framework for people leader competencies and then matched it to the curriculum as another check that it was covering all key areas we had envisioned. Additionally, I reached out to multiple senior leaders and field directors to get their input to see if anything had been left out. What began as a quest for some leader training has morphed into the People Leaders Competency Model detailed below.

For anyone who is in a people leader role, this type of tool serves as a useful self-evaluation to consider what areas may be worth investing in for continued growth; there may be opportunities to confer with the leaders above to get their input on development and training needs, as well as obtaining vital funding to support time, money and resources for leadership development. If we believe that investing in staff development is essential to our business needs, there can be no exception to the people leader development needs; people are our most valuable resources in an organization. Everything we do to upskill and hone or polish competencies will further elevate the success of the organization. Everyone should have an IDP (individual development plan), people leaders included!

As you reflect on the people leader competencies below, it's time to take stock of areas where you excel and those you want to bolster; what approaches can you take to advance your skills? Would an immersion experience for a week or two be helpful? Are there leadership initiatives or projects your direct leaders are involved in that you may be able to participate in for development? Is it time to delegate some of your tasks to trusted team members for their development to allow you to take on new projects for growth?

Keep your focus on competencies that will lead you to the next level and your leadership will undoubtedly propel you onward!

Medical Affairs People Leaders Competencies

Change Leaders

Change leaders create or promote a changed vision, develop a plan for change, and manage resistance and conflict throughout changes within the organization. The roles of change leaders include communicator, advocate, coach, liaison, and resistance manager; a key to being a change leader is communication, collaboration, and commitment.

Supporting Behaviors

- Change agility and management
- Inspiring and motivating others
- Influencing and persuasion
- Resilience
- Instilling trust and integrity

Collaboration with Others

Collaboration in organizations is essential to afford synergy that elevates the medical and business objectives. The sum of the whole is bigger than the sum of each part. Working together collaboratively results in greater accomplishments as we leverage strengths and diversity on our teams.

Supporting Behaviors

- Adaptable, polished communication styles
- Customer focus
- Emotional Intelligence
- Conflict management
- Teamwork and collaboration
- Cross-functional partnership / networking
- Leading without authority
- Active listening
- Presentation skills

Strategic Business Focus

Strategic thinking involves seeing the big picture of your organization and the specific paths to its growth amid changing trends and competition. Having business acumen means understanding all the ways your team contributes to the organizational mission. Understanding the organizational strategy is the foundation for achieving business goals. The strategic focus areas expand on an organization's vision and create structure around how to help your organization to achieve its goals.

Supporting Behaviors

- Strategic thinking
- Decision making
- Planning and organization
- Defining and facilitating medical strategy
- Technology, data, and digital fluency
- Innovation & creativity
- Business and budget planning
- Managing upward
- Compliance knowledge / COIs

Driving Results

Having a drive for results means consistently maintaining high levels of performance, productivity, stamina, effectiveness, and determination. It also means having perseverance even in the face of adversity, obstacles, or resistance. It means taking personal responsibility, accountability, and always looking for ways to improve.

Supporting Behaviors

- Performance management / PIPs / off-boarding / incentive compensation program
- Written and verbal feedback
- Staff recognition
- Virtual team coaching
- Accountability culture
- Effective management styles
- Cultivating and socializing best practices

People Development

Developing people means growing others' technical expertise and competencies by understanding more deeply both the practice and foundation of what is essential to achieve business objectives. Growing the team's expertise requires the ability to evaluate capabilities for a role prior to selecting candidates and honing key competencies to enhance the individual performance and contribution to the organizational objectives throughout the tenure of staff under a leader and across the organization.

Supporting Behaviors

- Recruiting, interviewing, and selecting staff
- Retaining top talent
- Crafting IDPs / Providing mentorship
- Employing diversity, equity, and inclusivity on teams
- Considering clinical/scientific acumen needs (how to deepen knowledge and stay current)
- Supporting training and development programs

Author:

Cherie Hyder, PharmD, MSL-BC

Cherie Hyder is Syndicated National MSL Director at Syneos Health. In her previous job at Biohaven Pharmaceuticals she supported a virtual launch of Nurtec ODT for acute migraine. She has been involved in drug development for more than 30 years, working at FDA in CDER and pharmaceutical companies including Pfizer, Lilly, Novartis, Solvay, and Avanir, among others. At University of Missouri, she received a Doctor of Pharmacy degree with the intention to devote her career to pharmaceutical research. She has multiple adjunct faculty appointments and enjoys teaching opportunities.

The Rise of the Real-Time MSL

July 2022

Medical science liaisons (MSL) have become one of the most prominent roles in the healthcare industry. While once existing as mostly a background role supporting the commercial end of pharma and life sciences companies, MSLs are now on the forefront of operations, strategy and execution. They are no longer just educating and informing doctors – they are accelerating medical science innovation.

We are witnessing the rise of the real-time MSL, empowered by fast and accurate AI-powered insights and data across the medical ecosystem. This paradigm shift is made possible by new intelligent technologies and the availability of massive amounts of healthcare data. Global healthcare data and analytics platforms enable MSLs to fully engage with doctors about the latest breakthroughs in science and medicine. The most up-to-date information on provider profiles, claims, payers, publications and medical research are all available at the MSLs' fingertips.

With these new technologies, MSLs can connect with the right practitioners in the right places for the right outcomes, accelerating efforts to get the latest treatments and therapies to market and improving the health of millions. This means the role of the MSL will only grow more dynamic and valuable in the near future.

The Growing Importance of MSLs Today

Healthcare today requires more nuanced, specialized approaches to treatments than ever before, and the explosive growth of new medical research is overwhelming physicians' ability to stay on top of it all. These changes have shifted the role of the MSL from being an overlooked niche to a frontline driver of strategy and growth. The value of MSLs to their organizations and the healthcare ecosystem has grown exponentially; they are the best people to engage with HPCs and to educate key opinion leaders (KOLs), doctors and other stakeholders about the latest science and medicine.

The Covid-19 pandemic elevated medical affairs and MSLs even more so. Everyone was stuck at home and face-to-face meetings were impossible to conduct. MSLs were in a unique position because they maintained access to physicians and KOLs. As Covid suddenly accelerated digital transformation, digital KOLs became even more prominent, and MSLs already had established relationships with them.

How the Role of the MSL Will Further Evolve

Today, MSLs occupy a pivotal position in the healthcare ecosystem, acting as a lynchpin between clinical, commercial, and R&D. The role of the MSL and Medical Affairs will evolve and increase in importance in three key ways:

1) MSL insights will be a driving force of company planning, strategy and execution

Life science and medical device companies need more than big data; they need deep insights gleaned from big data, combined with the expertise of MSLs. They also need these insights to drive company strategy and execution across the board, from developing new therapies and clinical trials to patient recruitment and go-to-market initiatives.

2) More technologies will be developed specifically for MSLs

The commercial side of pharma companies has long been showered with large budgets and the latest tech. Now, medical affairs is getting the same level of support. Major global pharma companies are hiring medical analytics teams and giving medical affairs larger budgets and more resources, and securing more partnerships with tech companies.

MSL teams empowered with the latest healthcare data and analytics technology will be able to strategically pinpoint educational gaps in the healthcare ecosystem and target them accordingly. For example, MSLs will know whether or not a physician does or doesn't understand if they should use chemotherapy or two immuno-oncology drugs in combination. This type of information will be easily available without having to use search engines or comb through spreadsheets.

3) New technologies will enable MSLs to understand the impact of their work in a compliant way

MSLs educate PCPs about certain conditions to help diagnose patients and refer them to a specialist sooner. MSLs want to educate HCPs about the latest therapies so that patients get the best treatment. So how can MSLs measure that? They aren't permitted to see prescription information. However, new medical data platforms make it very easy to access referral data. If the PCPs they are engaging are referring more patients to specialists, their efforts are working. If not, they can change how they are communicating and fill in the educational gaps. This will significantly increase the impact of medical affairs and the work MSLs do in a compliant way.

When MSLs are empowered with next-level, data-driven strategies, everybody wins – doctors, patients, organizations and society.

Author:

Ariel Katz, CEO & Co-Founder of H1

Ariel started his first company in college, ResearchConnection, to help connect students with research opportunities. That company grew to over 40 universities and was eventually acquired by the Bill and Melinda Gates Foundation and the Ewing

Kauffman Foundation. Ariel then helped co-founded, H1. Ariel Katz is currently the CEO and Co-founder of H1. H1 is a platform-based network that is dedicated to connecting healthcare professionals and companies with the aim of being the "Linkedin for healthcare." The platform now has over 9 million HCP profiles in 16,000 institutions in 70-plus countries. Its clients, which encompass over 35 pharmaceutical companies, including seven of the top 10, use the platform to do things like find doctors to work on a clinical trial for given biotech, find hospitals where they can do their clinical and find the thought-leading healthcare professional to lead a CME session.

The Importance of Using the Right Impact Metrics in KOL Management

July 2022

The scientific landscape and the ways in which we share and view evidence continue to change at a very rapid pace. Key opinion leaders (KOLs) are interacting with and educating colleagues, patients, and the general public in new ways, and the methodologies that we use to evaluate our engagement with them have also evolved. As MSL teams — and the levels of their visibility — expand within organizations via key responsibilities such as insight gathering and educational support for healthcare professionals, so too does interest in measuring the impact of their activities.

In particular, MSLs drive impact through their engagement of experts, which supports evidence generation and dissemination and, most importantly, improved patient management and outcomes. There are several ways of assessing the impact of KOLs and KOL engagement across the medical community. The most common method has been at the journal or author level, but now there are some other alternatives that can help to refine Medical Affairs and MSL strategic planning and engagement.

In the past, many of us have relied upon journal or author-level bibliometrics to evaluate impact. While these methods still may provide insight, they can also be unreliable. Let's have a look at some of these more traditional metrics.

Journal Impact Factors[1] (JIF) of those publications: This classic "citation-based metric" works on the premise that the more an article is cited by other KOLs who publish, the greater impact it – and, by extension, the journal in which it is published – has.

Citation metrics such as Eigenfactor, SciMago Journal Rank[2], and others are calculated by dividing the number of citations a journal received in the past complete year for articles that were published in the preceding two years. Journals that publish articles that are frequently cited have higher journal impact factors than those whose articles receive fewer citations.

Not all JIFs assess publications the same way, however. Some segment journals by subject areas but not necessarily by a specific disease. Consequently, their search results are incomplete and, because citation behavior varies among fields of science, the magnitude scores are not easily comparable.

Another problem is that mid-level journals[3] cannot be ranked with precision. Consequently, their rankings could vary by more than 10 positions with no meaningful change in the number of citations. A recent paper[4] notes that journal impact factors reflect the journal's quality rather than the authors' and that impact factors cannot be compared across disciplines. Others point out that the determination of an impact factor is limited to its impact in the scientific community and does not consider its impact on policy or on society[5].

The ability of journal editors to "game" the system is also concerning. A 2021 analysis of impact factor and SciMago rankings for trauma and orthopedic journals found the results were affected by self-citation – defined as editors citing their own publications within editorials. The analysis included 43 trauma and orthopedic journals with 151 editorials and found a positive correlation between journal self-citation in editorials and impact factor[6]. Journals also sometimes limit citable items[7] by selecting only papers that are most likely to be cited – effectively preferring hot topics to valuable, but more obscure research. To compound the issue, impact factors for scientific conferences or poster/oral presenters have not yet been developed, with the exception of the Dynamic Impact Factor, created a few years ago by Pharmaspectra[8].

Author-level citation metrics such as the h-index (Hirsch index) and G-index are similar to JIF but apply to individual authors. They measure the number of papers specific authors write and the number of citations those papers or authors receive.

Individuals' rankings vary according to the database the indexes use to track the authors and fail to consider the widely varying citation differences among disciplines and even among fields within the same discipline. Data for sub-diseases or rare diseases may also be missing.

Some alternative methods try to address the differences. Source-normalized impact per paper (SNIP)[9], for example, uses Scopus data to compare citations among scientific fields. But, that doesn't resolve the greater issue.

The correlation between a KOL's h-index ranking and recognition within the scientific community is declining because of changes in scientific communication methods and patterns[10]. Consequently, some researchers are questioning the value of impact factors themselves.

The Declaration on Research Assessment (DORA) is a prime advocate for improving the way researchers and scholarly journals are evaluated. Its premise is that authors should not be judged on the number of times they have been cited, but on the quality of their work. Therefore, DORA recommends not using journal-based metrics as surrogate measures of the quality of individual research articles[11].

Instead, it recommends assessing an individual scientist's contributions. When journal impact factor is used, DORA calls for using a variety of journal-based metrics, such as Eigenfactor, SciMago, h-index, editorial and publication times, etc., to provide a richer view of the journal's performance. It also calls for making a range of article-level metrics available to better assess the scientific quality of the work.

This global initiative, launched in 2012 to develop and promote best practices in this area, now has nearly 22,000 signatories[12], including institutions and individuals throughout the world.

Clearly, by focusing only on the traditional impact factor, MA professionals may overlook more relevant papers in less prestigious publications and may be unaware of some KOLs who prefer to present rather than publish their data. Basing decisions solely on impact factor inherently risks missing meaningful content and experts. Therefore, using traditional bibliometrics (which were developed for decidedly different objectives) to identify experts may take you down the wrong path.

New Impact Metrics Have Emerged

The challenges associated with traditional bibliometrics are evident, but what can replace or complement them?

There are several more effective ways to assess impact. They address specific needs, such as medical imperatives, specific therapeutic areas, the weighted share of scientific voice, and dynamic impact factors and can be applied to a variety of assessment solutions.

Share of scientific voice (SoSV) is a valuable way to assess KOLs' contributions. Pioneered by Pharmaspectra, it measures the number of disseminations of your product (and percentage share) and strategic topics across all scientific evidence compared to others in a therapeutic area (TA). SoSV can be measured for individual KOLs for their scientific contributions in a given TA, no matter how specific or in what specialty or sub-specialty they work. For example, a KOL's SoSV can be assessed across all scientific evidence, on a particular topic, such as Crohn's disease, or be measured by meeting presentations and abstracts, or publications only.

One of the most valuable applications of SoSV for MA is to measure the impact of individual KOLs across a team's medical imperatives and/or strategic topics.

For example, ocrelizumab made headlines when it was approved to treat multiple sclerosis in 2017. References to it in publications of the New England Journal of Medicine spiked in 2016 during the run-up to FDA approval and held steady for more than a year afterward[13] resulting in a high overall share of the scientific voice in its category. Qualitatively, however, a team also may be interested in assessing the SoSV and impact of a specific medical imperative being communicated. For example, it may want to identify potential differences between selected disease-modifying therapies (DMTs) or dosing regimens in relation to the long-term length of disease progression in multiple sclerosis (MS).

Applying that imperative now as a KPI for ongoing measurement ensures that an objective and strategic measurement is in place, to gain insights and improve MA impact.

Factoring in a weighted share of scientific voice helps further narrow the scope of potential KOLs. If looking at authors in the gastrointestinal space and Crohn's disease specifically, for example, one may have a high SoSV. Applying weighted SoSV, however, may lower that if, perhaps, the KOL is published primarily in a state medical society journal or in journals that were not

peer-reviewed and the other KOLs are published in high-impact journals or presented at major meetings.

Weighted SoSV lets MA professionals identify researchers who publish more frequently in specialty or subspecialty journals rather than those who publish less specific research in broader-based publications. By using weighted SoSV, you can identify and assess the impact of KOLs with deep subject-matter expertise more easily.

Weighted SoSV based on a specific disease state or medical imperatives can help you drill down to identify the KOL or data you want and, often, find it in somewhat unexpected places assisting you in assessing potential impact. For example, by using weighted SoSV to identify journals discussing multiple sclerosis (MS), virology journals are identified instead of neurology journals only. This would seem unusual, except for the fact it has been reported that EBV and several other viruses have been noted to be a leading cause of multiple sclerosis, with a recent EBV infection causing a 32-fold increase in the risk of developing MS[14],[15],[16]. Searching only using JIFs geared to therapeutic areas (such as SciMago) would not have revealed this.

Using peer-reviewed evidence, scientific presentations and clinical trials is not the only effective way to identify and assess the impact of relevant opinion leaders, however. In recent years, medical experts began turning to social media in increasing numbers, using Twitter, LinkedIn, and other sites to share and discuss scientific findings. While exact scientific usage numbers aren't known, the large numbers of articles and blogs discussing how healthcare professionals and scientists can use social media effectively to share findings and discuss concepts hint at the popularity and acceptance of this newer communications method. Even before the pandemic, in 2019, Nature Medicine, wrote, "From online journal clubs to 'tweetorials' to conference updates, social media is changing the dissemination and discussion of biomedicine.[17]"

According to LeverageRX, nearly 70% of U.S. physicians use the private social media outlet Doximity, which connects physicians to physicians[18]. Nearly 62% of plastic surgeons have active professional social media accounts, according to a 2019 survey of the American Society for Aesthetic Plastic Surgery, Inc.[19] Nonacademic surgeons topped the list, with nearly 72% having accounts.

An analysis of social media by diabetes researchers[20] that appeared in the journal Pharmaceutical Medicine noted that there are quantifiable differences between KOLs who Tweet and those who do not. "Those publishing most frequently on specific themes…were more likely to tweet about these themes," according to the paper. They also were most likely to have smaller networks. Surprisingly, however, authors with large networks and many academic co-authors were less likely to Tweet. Therefore, accessing digital KOLs may be a way to find specialists in highly specific content. Beware, however, that digital KOLs, as social media influencers, change frequently[21]. Nonetheless, social media can be valuable in identifying reliable KOLs.

The nephrology community is an example of how the use of social media has evolved. Before 2010, nephrologists commented on personal blogs and gradually moved to Twitter for quicker conversations. More formal outlets emerged, like the Nephrology Journal Club, which hosts chats or events around specific topics, and #AskRenal which combs Twitter for renal questions and then retweets the message, thus expanding physicians' reach[22].

For another example, data published in Pediatric Critical Care Medicine between February 1, 2020, and May 1, 2020, showed that tweets with "#PedsICU" were shared 49,865 times on six continents and included links to literature, reviews, and educational reviews[23].

During the pandemic, social media became even more important, by enabling data to be shared immediately with a global audience. In 2021, the second year of the pandemic, Altmetric found, not surprisingly, that 98 of the 100 research articles receiving the most attention were related to COVID-19. They generated more than 2 million tweets and retweets, nearly 50,000 news articles and blog posts, 481 videos on YouTube, 282 Wikipedia citations, and 277 policy citations[24], indicating that social media is here to stay as an important way of sharing information. Breaking the data into the Top 100 Featured Subjects showed the change in emphasis in 2021 from vaccines and therapies to social science and policy issues. [25]

By generating conversations around their research and opinions, researchers who tweet tend to garner more citations, according to a study in the Annals of Thoracic Surgery[26]

That fact isn't lost on medical journals, either. The Lancet, the New England Journal of Medicine, and other high-impact journals tweet regularly. The Journal of Medical Internet Research reported in 2021 that promoting publications on Twitter improved the metrics for academic medical journals, albeit by using alternative metrics for academic medical journals[27].

Altmetric, for example, recently developed a new way of determining online impact factors in the form of field-normalized metrics[28]. This method isn't based upon discipline but does consider discipline in its calculations. Describing this at its most basic levels, the algorithm includes the percentage of publications getting attention such as mentions in Twitter, Wikipedia, and news outlets, as well as many other variables. The articles then are scored by age, subject area, and format and by the attention they

actually received versus what they were expected to receive.

That may be fine for articles, but it doesn't do much to identify the right KOLs for your scientific activities. That's because, when it comes to KOL impact, social media presence is rarely reflected in author impact factor ratings. Dimensions, a sister company to Altmetric, includes Altmetric scores, which factor in social media, as well as patents, policy documents, research grants, and more[29].

Consequently, when selecting the most relevant thought leaders in a particular field for your projects, MA professionals should consider whether and to what extent both KOLs and digital opinion leaders (DOLs) are relevant for their strategy. Consider, however, whether a DOL's online presence consists of earned content (which references their work and is shared by others) or owned content (their own communications). How often their data are shared by others is crucial, and is a key to determining whether they are advancing scientific knowledge or simply sharing the work of others.

Ultimately, whichever impact metrics you use to drive your KOL engagement, it is key that they also enable you to effectively measure your own medical imperatives in relation to specific experts. Applying impact metrics will help you to assess the relative impact of KOLs on your strategy:

- By scientific dissemination and/or the digital landscape
- With specific subject matter expertise right down to sub-categories
- Who has current or emerging knowledge (e.g. rising stars)
- Who can't be identified using traditional methods?

Also, using newer impact analytics and algorithms that regularly and frequently mine data from publications, conferences, clinical trials, and the digital landscape will deliver the most up-to-date information to you, tailored to your specific medical imperatives. More importantly, they will give you the ability to identify the right experts who can properly interpret and use the evidence you provide to ultimately improve patient care

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Authors:

Joseph B. Laudano, BS Pharm, PharmD

Joseph B. Laudano, is Vice President, Medical Affairs at Pharmaspectra LLC. Dr. Laudano has over 30 years of experience in the pharmaceutical industry. Before joining Pharmaspectra, he was Vice President of Medical Affairs at Alliqua Biomedical. Before joining Alliqua Biomedical, he was Senior Director of Medical Affairs and head of Publication Planning at Forest Research Institute. Prior to this, he spent 21 years at Roche Laboratories U.S. in Medical Affairs and Marketing in various roles including; Director of Medical Information, Product Director, and Medical Science Liaison. He was Roche's first Medical Science Liaison, covering major institutions for the whole country and paved the way for the creation of an entire team. Joe has extensive research experience in several different therapeutic areas including infectious diseases, dermatology, and oncology, and has authored numerous publications and scientific posters.

Gail Dutton, BS

Gail Dutton has covered the business of life science for more than three decades, writing about the evolution of biotechnology, management trends, human resources development, and related topics. Her writing has appeared in more than 45 print and online publications, including Genetic Engineering News, BioSpace, and Life Science Leader. She has presented to the National Defense University and the Genopole Paris conference and is particularly interested in new technologies driving innovation throughout the enterprise.

David Kelaher, BPharm, MSc

David Kelaher is Chief Medical Officer at Pharmaspectra. David has 20 years of experience in pharmaceutical Medical Affairs and healthcare communications, driving therapeutic portfolio success and international brand growth for several of the world's leading companies, such as Sanofi, Abbvie, and AstraZeneca.

He was previously Managing Director of BBH Health, a specialist strategic and creative business within BBH, one of the world's most awarded agencies. During his five years at the agency, BBH Health became a global agency of record for HUMIRA, Symbicort, and Brilinta, and led the global brand development and launch campaigns for Fasenra, Skyrizi, and Rinvoq. Prior to this, David spent a decade at Sanofi, including Medical Affairs roles in the Australian affiliate, and as a Global Medical Director in the company's Paris headquarters.

My Top 7 Tips for MSLs Attending Medical Conferences

July 2022

To my esteemed colleagues who took time out of their day to listen online to the webinar session entitled, “Achieving Effective KOL Engagement and Intelligence Gathering at Medical Conferences”. First, gratefully acknowledge your interest and attendance.

Like any good educational session, our webinar was planned with clear learning objectives in mind. Based on some of your questions and comments, I thought it would be helpful to follow up with some additional guidance and specific tactical recommendations as you participate in upcoming medical conferences.

Overall, I’ve tried to concisely address the topic at hand (KOL/Congress Management), while drawing some parallels between our meeting and our work every day in the field. Please read on for a number of REAL tips and tricks!

Allow me to introduce myself since I came into our time together essentially with my hair on fire and technology melting at my fingertips (have you been there?).

I’m Jane Varian, and I’m a Senior Director in Field Medical for the Hematology division at BeiGene. I’m a nurse who found her way into pharmaceuticals quite by happy accident. I quickly moved from sales to medical affairs at a time when nurses were able to do so, and then earned my Nurse Practitioner degree while working as an MSL. I’ve been a “garden-variety” MSL for 16 years now, and my *minor* claims to fame are as follows:

1. I live in New York and therefore cover an academic, high-profile, tiny territory no matter what company I work for (it’s kind of fun, I can’t lie).
2. As a nurse, I’m usually the one reminding my team that oral adherence/diversity in clinical trials/serving the patient and advocate is a BIG deal.
3. I’m fairly direct, and I don’t hesitate to ask the hard questions (see #1).

I also have a bunch of kids and pets and hobbies, so the MSL life matches my frenetic pace—the pace that we are trying to harness during Congress season. As a clinician first (like many of you), I found parallels between the way we were taught at the bedside and the way we should best approach major conferences, and our incredible medical affairs careers in general.

Follow along and see if you agree.

1. **If you aren’t 15 minutes early, you’re LATE!**

- Learn from me—and maybe you’ve been there before yourself. To run to a crucial meeting while also juggling a mission-critical call from your manager AND reading an urgent, important email is a recipe for disaster. One cannot function with that level of cortisol pulsing through their veins. Give your calendar and yourself space to breathe. Do not overschedule yourself.
- Expect the congress shuttles to convention centers to run at least 15 minutes behind schedule; expect them to be full. Know the location of your stop the night before; they can be farther than you think. Plan accordingly by mapping your route (inside the convention center and out!). Know your nearest taxi stand/scooter rental/rickshaw outfit.
- Download the congress app, sign in, and be certain that it’s functioning properly–well in advance of the meeting. These apps can sometimes be more efficient than the web version of the congress platform. If you have “assigned abstracts”, be sure to find and favorite each one—then take a screenshot of your list just in case the app/your technology/your life crashes midweek. I like to export all my abstracts/sessions from the app to my calendar. If your phone or computer is showing signs of “imminent apoptosis”, you might want to consider replacing those devices before the meeting.
- MSL 101: being respectful of KOL’s and colleague’s time is NON-NEGOTIABLE. If you tend to run late, fix that in a hurry or face MSL peril.

2. Plan ahead, plan contingency, plan emergency

- Your meeting room is locked? Your laptop screen suddenly went black? Your CMO is stuck on the tarmac in Newark during your MOST important KOL meeting in Chicago? All can easily happen, and all have workarounds

that you must implement. To be a “fixer” (this is expert-level MSL, in my view), you must have all your pieces in place well in advance of a congress in order to successfully get yourself out of any sling. Such as…

- Be sure you have congress contact information for every attendee with whom you plan to meet. Pro tip: this is a great way to ask your KOLs for the Gold Standard of contact information–the cell phone number. Extra points if you end up with some witty banter on a text by the end of the meeting.
- The above goes for all of your internal colleagues as well—especially if you are conducting joint meetings. Know “who does what” from your company before you get there, especially these functions: meeting room planner, badge/registration contact, your key Medical Directors at hand, Clinical Development for each agent, compliance partner, and friend you want in the foxhole with you. To name a few.
- Do not hesitate to confirm meetings both 24 hours and one-hour pre-start time. If you suspect that someone vital might not make the meeting, start asking delegates for backup as early as you can. If all else fails, ask your line manager to attend and take notes so that you can focus on the conversation. Don’t be afraid to ask for help.
- Know clearly the objective of your KOL meeting, and bring the best folks from your side along for the ride. I don’t like to have more than a 3/1 ratio of the industry to KOL at any one meeting. Sometimes, as a leader in the field, you must make strategic decisions in order to protect your KOL relationship. Align. Be diplomatic. Communicate cross-functionally, and you’ll win.
- Send meeting agendas and any materials within the calendar invite for your meeting, so that it’s easy for everyone to quickly access.
- Have a backup for tech issues. Hard copies of vital documents, a book to jot insights, photos of important data on your phone for quick access in a pinch…whatever works for you, use it!
- Bring extra phone cords and a backup battery; meeting apps and texts drain your phone. Also, your less well-prepared teammates will think you a hero when you pull out a card to share, and there is nothing wrong with making friends. Always have a pen handy to use or lend. Carry plenty of business cards.

3. If you didn’t document it, you didn’t do it!

- #1 Rule of Competitive Intelligence (CI): like fish and houseguests, it starts to overripen after 72 hours. Be sure to report CI with haste; it’s much more meaningful to your organization when you do. Also, you remember a lot more about the fine details.
- As we mentioned in the webinar, CI is a primary function of any medical affairs team. Before you go to the meeting, be sure you have a clear understanding of WHERE, HOW, WHY, and WHEN to document CI. Assess your team’s commitment to the practice, and be sure it aligns with the leadership team’s vision. Sometimes, CI can float to a level of lower priority due to any number of events; a shift or event in personnel; life cycle management; increased interest in areas such as research, or just too much else to do puts CI at risk.
- Collect CI in whatever way works best for you, but do your best not to replicate your documentation. It’s important that the time required to document is in balance with the procurement. For MSL leaders, be as clear and concise as possible around expectations for CI, and educate your teams on exactly where and how the information will be used. Be sure to give credit to CI when events occur that benefit from that insight.
- As an “old school” MSL, I prefer not to use HCP names or even institutions or cities when providing CI. I use descriptors such as “an academic physician who specializes in [Disease State] at an urban institution in the Northeastern US”. Keep in mind, that many of your KOLs may be under a Confidentiality Agreement with your company—and usually, that means, so are you! Be careful not to share CI with external physicians in any specific way and be sure that your colleagues follow the same practice.
- If you have a CRM, do yourself a favor and record your interactions as you go. The information you provide is of far greater accuracy, and no one likes to spend the week post-ASCO recording calls. You’ll have enough to do.
- A post-congress report is often generated as the result of these meetings. Usually, the “lead” MSL of the meeting is the responsible party, but occasionally it’s led by the leadership team. Know what is expected of you in that report before you land in town. Encourage the report authors to use source documents to create a dynamic, concise report. This brings me to my personal favorite…
- A report of all KOL interactions at the congress is also usually generated. These lists usually include both commercial and medical events if your compound is a marketed agent or in launch mode. Be sure you are aligned with commercial colleagues on the objective of any compliant “joint” meetings. While cross-functional coordination can be tricky, it’s also probably where Field Medical exhibits the most value to our friends across the aisle. Be sure that the materials you plan to use in a joint call are compliant for all parties, well cited, and purely scientific in nature.

4. See one, Do one, Teach one

- In congress management, this principle applies heavily to the LEAD of your congress. These folks should be

seasoned professionals, yet not so set in their ways that they cannot see the benefit of pivoting when needed. I find it a best practice to have an HEIR and a SPARE here, the heir being the expert lead while the spare is a less-tenured co-lead whose task it is to support the lead and learn the lead's role.

- The MSL Congress Lead should be heavily involved in all appropriate company strategy meetings for any given congress, and they should be sure to benchmark the activity of their MSL team to the overall goals of both Medical Affairs and their Company. If this alignment seems deviated, then the Lead should feel empowered to address their strategic concerns with Medical Leadership.
- The Congress Lead usually also has the thankless job of combing through ALL of the abstracts and assigning them to the team for coverage. The Lead should be free to speak with an internal stakeholder who can assist. Chances are, your business intelligence gurus, med info, publications, commercial teams, and training departments are also doing the "abstract crawl"; best to share lists freely and save precious time (not to mention sanity).
- When assigning abstracts among the team, good success can be achieved if you align the Principal Investigator with their MSL as often as possible. This practice also tends to create harmony in covering smaller therapeutic settings; assigning each MSL a "theme" disease state or subset can be beneficial to all.
- Booth duty can be very fruitful but creating those assignments can be a real task. Sending out an empty schedule grid for the booth in the same communication as the abstract assignments, with the request that each MSL signs up for their own booth duty, can get 90% of the work done for you. Booth duty cleanup is a good task for the co-lead. • Now then, say you're newer to the group—you're not leading the congress, heck you've never been! My advice to you? Find a buddy. A VETERAN buddy you respect. Then listen closely. Keep up with them. Take their good advice.
- Are you a veteran MSL and you mercifully avoided the lead role this year? Be a mentor. Show what good looks like. Offer to come to a colleague's meeting that's falling apart, simply for support or to offer a scientific exchange if needed. Keep your attitude positive and productive. MSLs are, by nature, very good at "growing their own" and supporting newer colleagues.

5. Stay in your lane

- Let's face it, there are a LOT of people at these major conferences. That means many requests for your KOL's time. The respect we show for their time impacts the entire relationship. Be sure that you have a reasonable business objective for meeting them at the venue. If you are seeking CI, but have no other pressing research or development need, consider requesting a shorter, more casual meeting this time.
- For marketed agents, your commercial team will play a role in how your plan for the meeting. Be sure you read and understand your company's compliance manual. Be transparent. If the content of your meeting is appropriate for a broader attendance (say, an introduction to a KOL), then support joint meetings to respect everyone's time. If your meeting is not appropriate for commercial attendance, be clear and unapologetic. The key is to ALIGN BEFORE the congress, not during.
- The last few weeks before the congress, expect a lot of planning calls. Weekly cross-functional status calls between commercial and medical may seem painful, but they are quite informative and can prevent problems.
- Keep your assigned abstracts straight! As mentioned in the previous section, a good way to split abstracts among the team is by geography or therapeutic subset. This usually will create some themes that are important to carry through to post-congress meetings and initiatives. If you are assigned to a major abstract, consider yourself the "company expert" on that abstract and be prepared to thoroughly present and discuss the data set at any moment. Your role in presenting a key data set may be one of the more high-profile cross-functional internal activities you do all year.

6. Know your role (Why are you in the room?)

- The role of the MSL (and the MSL leader) varies among organizations at congresses. I submit that there are two variables that greatly impact this role: 1) the life cycle of your lead compound and 2) the size of your medical affairs organization. Meeting attendance for a 5-year-old gold standard PD-1 inhibitor looks a lot different than it does for a niche, novel CAR-T therapy in the prelaunch phase.
- Are you a part of a small Medical Affairs team, where you do everything from procurement of abstracts to slide development and medical writing? Well then, NAIL IT! Be sure you have role clarity about the expectations of you from a KOL engagement/CI standpoint in this type of setting. You cannot do all the tasks; you simply will run out of YOU.
- Are you in pre-launch at a biotech or young company? Follow ALL the Principal Investigators and abstracts that you can in your disease state. Watch social media hashtags. Synthesize your understanding of the current landscape and key players. Get to know them. Ask a lot of questions. Observe how your potential competitors are moving about in the space. Who's funding all the Independent Medical Education? Sometimes, it's not so easy to

see that from the cover letter; dig deep to understand the supporters of each session you attend.

- Are you launching soon??! Hooray! Fun times ahead! You better know your data cold, and theirs too. At this point, your academic physicians should have been well engaged—this is the time to start seeing a broader audience. If the treatment space is crowded, this will be one of the more challenging access issues at large congresses. The more prevalent the disease state and the more prevalent the treatment, the more competition for time at the KOL level. Plan meetings with CLEAR objectives in mind; if the KOL senses that you are simply meeting to "say hi", it may feel frustrating. Understand that sometimes, a well-timed cup of coffee in the convention center and a longer follow-up meeting two weeks later upon return home can win the day for these busy KOLs.
- Are you at a Big Company, working on a Big Drug? You've got a LOT of resources behind you, so let them do their jobs (see also: stay in your lane). Your job, likely, is to continue Competitive Intelligence and Scientific Engagement with as many KOLs as possible. Your company may be so large that you even have internal colleagues doing a lot of the research work you used to do, so you may not have that direct access to research any longer. Your job is to create some value in what you provide to your KOLs, and that is your clinical expertise. Focus on that. Meet with everyone. Be seen everywhere.
- Are you in the Data Desert? Is your compound or device a bit advanced in age, with not a lot of news to tell? Or worse, have you had some setbacks in the development of late? BE PRESENT. Have a clear understanding of the reasons. Be frank with your KOLs about the utility of your compound, and ask good questions. Your work on a difficult agent is character-building, and unless you are considering frequent geographic relocation in your future, you will likely see ALL of these KOLs again. This is the perfect setting to establish your reputation as a credible, trusted medical partner even when the chips are down. •
- Whatever your role, do be sure that you and your Medical Affairs team have done the work of cross-functional communication internally. Have a playbook. Make sure you've heard the compliance messaging. Have your backup documentation plan. Have your contacts and apps updated on your phone; be sure you've booked international cell phone use if needed. Pack light.

7. First, Do No Harm

- And by this, I mean, WEAR COMFORTABLE SHOES.

Author:

Jane (JC) Cramer Varian, MSN NP

Jane is a Senior Field Medical Director at BeiGene, USA. After a hospital bedside nursing career, Jane began her pharmaceutical work over 20 years ago with Pharmacia and Upjohn. She has since served on oncology and hematology field medical teams with Sanofi, Pfizer, Bayer, Astellas, and others. Jane's primary focus is on both New York's academic physician-scientists and the cancer patients and families they serve. As a Family Nurse Practitioner, she holds advanced nursing degrees from Clemson University and Mount Saint Mary College.

Jane lives in Saratoga Springs, New York with her family, where she serves as the Vice President of the Board of Directors for the Saratoga Shredders, a non-profit girls' mountain biking organization. Jane also is an Advisory Board member for Alucio, a pharmaceutical software company. For correspondence, Jane can be reached at jane.varian@beigene.com.

Chasing the Elusive Field Medical Affairs Impact Metric

July 2022

Medical science liaisons (MSLs) are vital resources to execute industries' medical strategies and deliver insights from the voice of the scientific and healthcare community. Peer-to-peer engagement supports the education of scientific exchanges with the medical community to ultimately improve patient outcomes and therapeutic decision-making. MSLs are the field force of the medical affairs department, which is the largest and most challenging medical affairs function to measure. The dilemma field medical continues to face is their ability to effectively show the impact their field teams have on the organization.

The mission of the industry as a whole is to improve the lives and outcomes of patients. Medical affairs, especially field medical, is one of the primary functions in the industry to embed patient outcomes as part of their measurable value story. However, metricizing patient outcomes within field medical's value story or impact is still a challenge medical affairs leaders struggle with since balancing quantitative versus qualitative outcomes is inherent to this process. Focusing on field medical affairs, there are multiple outcomes that relate to impact and these include external interactions, insight generation, knowledge advancement for specific audiences, competencies (both externally and internally), patient outcomes, and public health.1 It's vital for field medical affairs leadership to roll these outcomes (in the form of activity-based goals and objectives) into the medical strategy for the therapeutic area and develop strategic imperatives and listening topics for field medical or MSLs. With these imperatives, leadership can develop metrics for the MSLs. These metrics or key performance indicators (KPIs) must align to the medical strategy, which is aligned to product lifecycle-based priorities.

What is missing and still makes KPI building a challenging, and seemingly elusive task for field medical is the lack of standardization. Industry-wide standardization of terminology and process will allow medical affairs professionals and leaders to build robust metrics, which are vital to optimize the impact and elevate the performance of their teams. Multiple white papers and guidance documents 2 have been created by industry professionals to move in the direction of standardization. Aligning metrics to these standards set by experts is the first step in the process. Briefly, metrics can be divided into two buckets: outcomes-based and goal-based. Outcomes-based metrics are typically tied to external factors that demonstrate impact. These are generally broad in nature and usually involve cross-functional collaboration to achieve. Goal-based metrics measure the relationship between the activities or tactics and specific outcomes, which are often both internal and external as well as qualitative and quantitative. Many tools exist to aid leaders in creating goal-based metrics. Both outcome- and goal-based metrics must be tied to the strategic imperatives, defined by medical affairs leadership. Further, MSLs need to be 'bought-in' to the metrics for successful implementation, which can be achieved by involving the field team in the process.

When developing KPIs it is important to appropriately balance the use of both quantitative and qualitative metrics since quantitative metrics alone cannot truly measure impact and often do not lead to the desired outcomes. Examples of quantitative metrics include a number of thought leader (TL) engagements, number of insights gathered, number of medical information requests, and number of congresses attended; qualitative metrics include an increase in TL advancement (knowledge, practice change), peer introductions, the actions taken on the insights, and TL feedback through surveys. Qualitative metrics should inform on the impact field teams are having during their interactions and quantitative should inform on how the MSLs are spending their time so that the relationship between the two can be assessed. Therefore, balancing qualitative and quantitative metrics is as important as aligning the metrics to the organizational medical strategy.

One means of measuring the relationship between MSL activities and outcome, both quantitative and qualitative, is layering in real-world data to serve as a surrogate for clinical impact. Here we present a recent client case study using a common MSL initiative – healthcare provider (HCP) education.

TABLE 1: Case study overview

Situation	**Client launched a new later-line therapy for advanced-stage disease in September 2020**

Education initiative	New therapy required that a specific non-standardized test be ordered prior to therapy start for appropriate dosing. Percent of patients receiving this late-line therapy was expected to be low.
MSL activity	MSLs educated providers regarding the new therapy, including reasons for ordering the test.
The outcome to be measured	Client desired to know whether the providers started ordering the test at increased levels using real-world data, as a surrogate measurement of clinical impact.

The client medical affairs leadership in this case study was attempting to link MSL activities with an external outcome using a surrogate endpoint. Specifically, they wanted to know if there is an increase in orders for the required testing post-product launch. As the MSLs played a significant role in the educational efforts pre-and post-launch, when combined with internal quantitative internal MSL metrics, the clinical impact of the MSL activities and potentially the educational content can be assessed.

The real-world study design required data from two data sources; the diagnosis data and longitudinal prescription data of patients who were also taking first-line therapies along with a percentage of patients with test orders (CPT codes) of interest. These data were collected over time from Q1 2020 to Q3 2021, which included six months of pre-launch baseline data and one year of post-launch data. As seen in figure 1, testing rates clearly increased over time, starting with a rate of 2.3% during Q1 2020, which remained constant for the six months pre-launch, and increased to a rate of 4.7% during Q1 2021 (t-test p-value <0.001). Testing more than doubled during the study's time period. It's important to note that the cause of the increase could include several factors occurring at this time. Additional analyses are required to provide a more direct correlation.

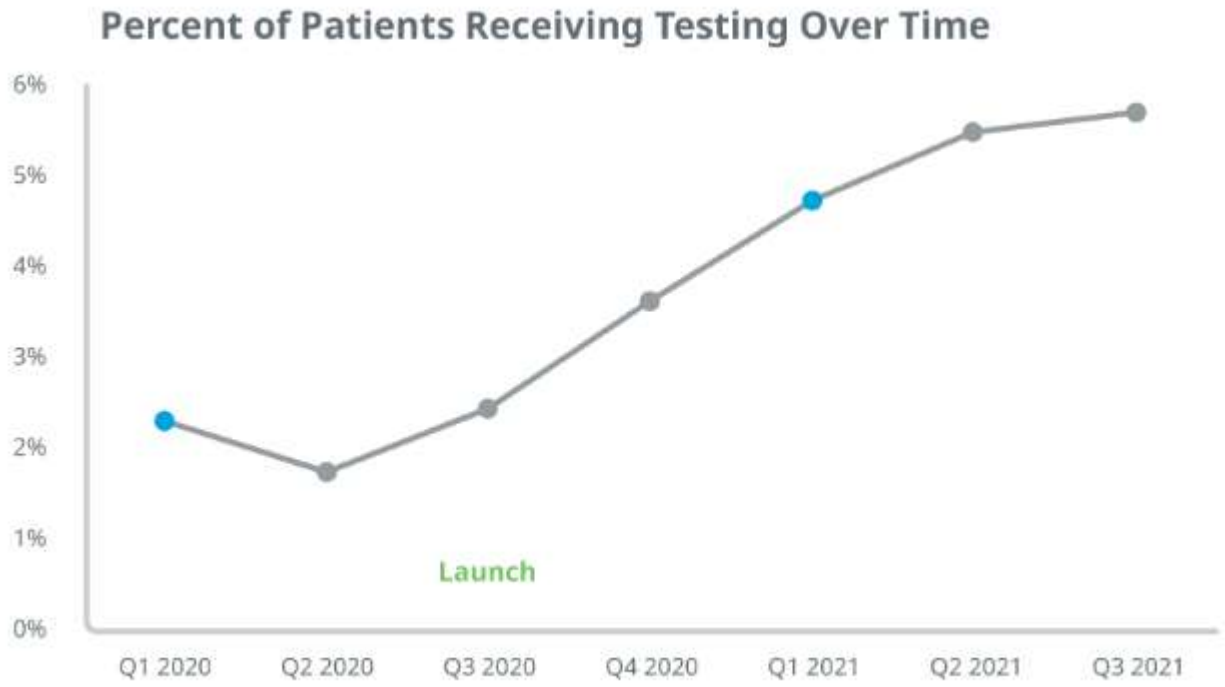

Figure 1: Testing rates as a surrogate for clinical impact

With greater access to real-world data and the growing volume of patient-level data, medical affairs leadership now has the means to incorporate more patient-linked quantifiable endpoints when assessing the complex nature of an MSL's performance. Many of the metrics that were deemed qualitative, such as HCP education, can now be linked to external outcomes that aid in making these metrics more quantitative. Leveraging the use of real-world data along with additional internal metrics to show the impact of field medical is crucial in driving the medical strategy and ultimately improving patient care.

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Authors:

Linda Traylor, PhD

Senior Principal, Medical Affairs, Medical Affairs Center of Excellence

Current responsibility

- Leads client engagements and cross-functional delivery teams to develop innovative RWD solutions
- Leverages the full global digital health, research, and data science capabilities of IQVIA
- Based in South Carolina

Profile overview

- Linda has nearly 25 years of experience in clinical research and medical affairs across industry (pharma small to large, medical devices, biologics, diagnostics) with extensive cross-functional support know-how.
- Linda's career has spanned multiple therapeutic areas including oncology, immunology, infectious disease, diabetes, cardiovascular and kidney disease as well as precision medicine.

Education

- BS, Chemistry, University of Arkansas
- PhD, Pharmacology and Toxicology, University of Arkansas for Medical Sciences
- Postdoctoral Research Fellowship in Cardiology, Duke University Medical Center
- MSL-BC, Board certified by Medical Science Liaison Society and Advisory Board Member

Areas of expertise

- Linda has held multiple medical and clinical affairs positions throughout her 24-year career from Medical Science Liaison to Dept Head for Clinical Development and Medical Affairs (CDMA).
- Linda's medical affairs expertise spans FDA regulated drugs (3 first-in-class), devices (cell therapy), biologics (immuno-oncology), and non-FDA regulated laboratory-developed tests (genetics and complex and machine learning-based proteomics)
- Linda has developed an expertise in solving complex medical affairs challenges and developing data-based narratives to support clinical research and product adoption.
- As CDMA Department head, Linda as built teams supporting all traditional (and non-traditional) medical affairs functions.

Linda is passionate about distilling complex issues down to simple data-driven solutions for the healthcare industry.

Rina Patel, MD, Director–Medical Affairs, Strategy and Development, IQVIA

Current Responsibility

Rina is responsible for leading strategic planning and management of a team of Regional Medical Directors who will serve as Medical Affairs Project Leads for our clients and be responsible for tactical execution, managing the operations, and oversight of a given project. She leads and drives the implementation of the strategic vision, direction, and deployment of the Field Medical Affairs team. She also monitors and provides timely insights on emerging clinical and scientific trends to identify opportunities and potential issues that may affect medical affairs field roles and adjust strategy in response to changes.

Areas of expertise

Rina has strong a business acumen experienced in managing field medical affairs team, gathering and communicating insights to multiple stakeholders, providing a medical review in clinical development, identifying, and addressing safety concerns, along with developing and executing medical strategy.

Education

Rina did her undergraduate studies at Drake University and received her *Doctor of Medicine* from St. Matthews University. She recently received a *Leadership and Management Certificate* from Wharton School of Business.

Profile overview

Some achievements include successfully managing a national field medical affairs team with the implementation of a customer medical affairs strategy, along with creating customized dashboards for external stakeholder relationship advancement. Worked cross-functionally with real-world evidence, clinical development, medical information, safety, market access, and sales.

Relevant experience

Rina has more than 10 years of combined experience in the clinical, academic, and pharmaceutical industries in a variety of therapeutic areas.

Identifying Reliable KOLs and Research With the Next

Generation of Citations

July 2022

The engagement of key opinion leaders (KOLs) is critical for pharmaceutical companies to develop their clinical research programs and for strategic planning. Historically, identifying KOLs has relied on personal recommendations as well as tools and services that aggregate metrics about the impact of a researcher.

While such approaches have been adopted widely and proven fruitful, utilizing the standard measurements of impact such as the number of papers on a topic, how often a researcher has been cited, their h-index (a measure of a researcher's productivity and impact), and so on leaving a lot to be desired. Most notably, current metrics lack any insight into the reliability and reproducibility of the researcher's work. As documented by others, reproducibility is a large and growing problem in drug development that can cost pharmaceutical companies significant amounts of time, money, and energy.

Identifying reliable research, and consequently, researchers would allow for more reliable KOL engagement and recruitment. But even with current methods, this process can be prohibitively time-consuming.

The Inefficiencies Created by Traditional Citation Metrics

The findings that scientific researchers publish are rarely in a vacuum; instead, they build on a growing body of work through citations: the references made to findings and claims from prior literature. These citations, and the textual context in which they are used, represent the constant scientific dialogue that shapes and informs our understanding of natural phenomena.

And yet we collapse this wealth of information into a single number: how many times were they cited?

In doing so, we lose the ability to qualitatively understand how they were cited by others. What was said about someone's research? Can others reproduce their findings? Can I trust them to lead a clinical trial for a new drug we are developing? Should I invest time in building a relationship with a potential KOL?

Answering such questions requires a manual, time-consuming process of reading someone's papers, finding other works that cite them, and seeing what they say by pouring over countless full-text articles. Doing this properly is further complicated by the interdisciplinary nature of science and the rapidly increasing rate of new publications. For someone new to a disease area, this can be a non-starter.

Medical science liaisons focused on identifying and developing relationships with clinical experts are forced into a series of trade-offs between evaluating how reliable a potential KOL's research is and how quickly they can find and establish relationships; this in turn has significant business implications for pharmaceutical companies.

So what can be done?

The Next Generation of Citations

Recent advances in bibliometrics from scite unlock the latent power of citations by building a system that catalogs the world's largest database of Smart Citations.

Now, in addition to knowing which publications reference a given paper, you can see:

- Citation statements — the relevant sentences from each citing paper where a citing paper references the publication you are looking at
- the section each citation statement is from in the citing paper (e.g. Discussion, Methods)
- a classification from a machine learning system indicating whether each citation statement from a citing paper offers evidence that supports or contrasts the claims made in the original paper

By associating information about these citation statements and publications, and by linking them with metadata about authors, it is possible to identify key experts in specific disease areas and efficiently build an understanding of how reliable their research is.

This approach has profound implications for how medical science liaisons discover, evaluate, and maintain relationships with KOLs.

For example, using the search feature, it is possible to refine search results to find reliable publications in disease areas by excluding research with findings that are heavily contrasted, or those with retractions. From the filters, an MSL could quickly see the top researchers that were involved in authoring those publications.

Moreover, an MSL can view the profile for each of those researchers, which outlines how they were cited in the rest of the literature, and also includes a list of papers they've authored. Loading the scite report for each of their papers exposes the relevant citation statements, helping anyone grasp how someone's research was received by subsequent papers.

By configuring alerts for new citations to groups of papers, an MSL can be notified when there are new supporting or contrasting citations to research published by one or more experts they work with (or are evaluating as candidates), helping them stay on top of the ever-growing body of scientific literature, and making it easier to effectively operate in multiple disease areas.

Indeed, not all citations are equal. We believe that bringing back the context to citations will be transformative for scientific research, and we, in part, hope to improve how drug research and development is done by eliminating some of the inefficiencies introduced by traditional citation systems.

To learn more about how scite can be used for this purpose, read https://help.scite.ai/en-us/article/identifying-scientific-experts-in-a-field-of-research-1t6b0bh/.

Authors:

Josh Nicholson, PhD

Josh Nicholson is co-founder and CEO of scite (scite.ai). He holds a PhD in Cell Biology from Virginia Tech, where his research focused on the effects of aneuploidy on chromosome segregation in cancer cells. Previously, he was the founder and CEO of Winnower and the CEO of Authorea (acquired in 2018 by Wiley), two companies aimed at improving how scientists publish and collaborate.

Ashish Uppala

Ashish Uppala is a graduate of the University of Maryland, and an early employee of scite. He has worked in both academic research and software engineering, having previously been a research fellow at the National Cancer Institute before developing a career in technology. His experiences in academia, medicine, and software motivate him to find new ways to improve how we engage with and conduct research.

What Could Faster Medical Insights Management Mean for Patient Outcomes?

July 2022

As trusted subject matter experts, Medical Science Liaisons (MSLs) play a central role in capturing and disseminating insights to external and internal stakeholders. However, even amid the digital transformation of Medical Affairs, there are heavy manual burdens to bear. Presently, there are more heterogeneous sources, where insights are collected across teams in many different formats, from field medical to the advisory board to medical information, generating more medical insights than ever before. They are intertwined in workflows that represent months of valuable time and expertise.

As such, a growing number of Medical Affairs teams are reexamining their insights management process. One key metric that has been underscored is the length of time it takes to complete the insights cycle, or the timeframe between observation and action – the insight 'half-life'. Chief Medical Officer and SVP of Global Medical Affairs OBG at Eisai and Co-founder of the Medical Affairs Professional Society (MAPS) Kirk Shepard detailed his approach to speeding up the insights cycle in a recent webinar hosted by Sorcero. He advised, "Get together with leadership or your team to show that circle and how long it took for an insight to come in and how long it took for that to be made into an actual decision. The decay of insight can happen very quickly, and that's a tragedy when you see something deteriorate." If this process is not optimized, it opens up the potential for data silos, delayed responses, and gaps between Medical Affairs' efforts and patients' needs.

New innovations, particularly in artificial intelligence (AI) augmented analytics, are accelerating the insights cycle and taking charge of the modern data deluge. In working with global pharmaceutical and biotech enterprises, Sorcero has found that one of the most effective ways to accelerate medical insights management is to arm Medical Affairs with an omnichannel view that enables teams to track and analyze content across diverse and divergent sources. Centralizing this information has been shown to uncover 300% more insights in real-time, reducing the time to surface key findings from months to hours. Whether it is content from literature, CRM notes, or social media, AI enrichment provides Medical Affairs with a data hub that can automatically generate customized reports to share internally or with health care providers (HCPs) and key opinion leaders (KOLs).

Rather than spending manual hours gathering and sorting through spreadsheets and field notes, Medical Affairs is adapting its strategic focus based on real-time data and evidence, extending beyond the quantitative into the qualitative. For example, with AI-augmented insight, teams can not only evaluate the number of reactive versus proactive conversations but also assess the topics of discussion in context. What topics are arising most often amongst KOLs and HCPs? What do they care about? What is bringing them together? How does it impact the patient? Utilizing a comprehensive visual overview of the landscape enables teams to dive into any of these areas with a better perspective of the priorities of patients and providers, delivering the medical voice of the customer (MVoC).

Streamlining the process also reduces dependencies on multiple channels and brings levels of the organization together to drive strategy and create impact. By reducing manual steps and accelerating the medical insights cycle, data-backed decisions can be formed in minutes– with more context and reduced risk of bias. Omnichannel AI analytics also provide direct links between clinical results and patient outcomes. AI-powered capabilities, such as auto-summarization, sentiment validation, and tracking by HCP roles, drug agents, disease state, product, specialty, region, and strategic imperative, empower an agile approach to the insights cycle and enable Medical Affairs to focus their efforts where they can drive the most impact.

When it comes to advancing a more strategic approach to insights, Shauna Aherne, President of MedEvoke, emphasized in Sorcero's recent webinar, "Ultimately, it is about putting the power in the hands of Medical Affairs. It's about taking the enormous amount of data and information that exists in the space and giving Medical Affairs the tools to monitor and analyze it within the larger scope of their strategy." One major component of designing a successful strategy often comes down to positioning AI-augmented insights as a companion to Medical Affairs.

However, AI does not eliminate the need for expertise. In fact, it frees up critical medical expertise from manual data review to provide oversight of this data. When partnering with AI-augmented insight, the value of Medical Affairs' expertise is just as important as ever. The difference is, that now, Medical Affairs can make more data-driven decisions that reach patients in far less time.

Each day across the life sciences, experts are overcome with new data. There is a huge opportunity for artificial intelligence to help harness this data. If AI can deliver the right data and insights, at the right moment, it can ultimately transform how

scientific and clinical data is delivered to improve patient care and outcomes.

Author:

Richard Graves

Richard Graves is an awarded entrepreneur scaling sustainable solutions to address global challenges. As CCO and Co-founder of Sorcero, Richard partners with multinational life sciences enterprises and technology leaders to deliver clarity through advanced analytics that improves scientific engagement and patient health outcomes. He cofounded Sorcero to accelerate the diffusion of medical innovation and breakthrough therapies and transform how medical science and data can inform treatment through groundbreaking advances in AI solutions. Prior to Sorcero, Richard was CIO and Co-founder of CleanChoice Energy, a data science-driven startup that grew into the largest 100% renewable energy supplier in the U.S. and a Deloitte Fast 500 and Inc. 500 awardee. He has also served as Technical Advisor to the U.S. Department of Energy's $200 million SunShot funding program and Senior Advisor to Village Capital.

The Fine Line: Professional and Personal Relationships

July 2022

Relationships are the backbone of not only humankind, but they are also an imperative element of our roles as MSLs. The Merriam-Webster dictionary defines relationship as "the state of being related or connected", and research shows our brains respond positively to people when we feel a personal connection with them. Relationships play a vital role in both our personal and professional lives; however, differences exist between these two types of relationships, and these differences are not often discussed. Understanding these differences is crucial to knowing what to expect from each type of relationship and avoiding the perils of blurring the two.

The underlying principles for personal and professional relationships are the same: communication, trust, respect, and the ability to resolve conflict. Beyond these similarities, the two types of relationships diverge.

Personal relationships are relationships with family and friends and are formed from the earliest days of life and are maintained throughout life. These relationships are based on love, trust, and compassion. A genuine desire exists for the well-being of the other person and this desire is the guiding force that pervades relationships.

A key difference with the professional relationship is the origin of the relationship. The professional relationship arises through work; hence, professional relationships may change as a career grows and opportunities arise. It is important to note that a working relationship is not a friendship, although it may transcend into a personal relationship. Professional relationships involve people working together for a common good: colleagues working towards a common goal for the benefit of the company or an MSL and physicians collaborating for the benefit of the patients and improved outcomes. Professional relationships are also

forged to strategically advance career goals.

Since professional relationships are interpersonal connections built in a place of business, they tend to be more formal than relationships that exist outside of work. Work culture and professional expectations guide how people should behave towards one another. Boundaries exist with the intent of keeping the professional relationship distinct from a personal relationship.

As the origin and intent vary between the two relationships, the risk of each type also varies. In a personal relationship, pride is at risk. In a professional relationship, livelihood is at risk, and this demands that more caution is exercised in this type of relationship. As in a personal relationship, a professional relationship may also include a genuine like for and support of the other person. However, the true intentions of another person in a professional relationship may not always be known. Jealousy, competitiveness, dishonesty, and sabotage in the personal realm pale in comparison to how these can play out in the professional domain. For this reason, it is imperative to remain professional in working relationships.

Some professional relationships do develop into personal relationships depending on the persons involved. Making a friend is a bonus; it should not be an expectation of the professional relationship and not a requirement. Having a relationship that is both personal and professional is okay if both parties involved maintain a healthy gap between the two, find a way to be both professional and personal and remain effective in the job.

Connecting with people and forging relationships is a part of human nature. Relationships ground us and provide opportunities to learn, grow, and have a sense of belonging. They allow for commonalities to be found which help build the key element of trust. It can be easy to blur the lines between personal and professional relationships. Within limits, developing fun relationships at work is acceptable, but it is important to remember that these relationships developed through work are not meant to become too intimate. Oversharing in the working relationship is a common error and can lead to the perils previously mentioned. Professional interactions should be enjoyed, and appreciation shown to those who mentor, provide support, and offer advice. Understanding the differences in the two types of relationships allows us to remain strategic and negotiate our professional relationships in ways conducive to ongoing success.

Author:

Angela Valadez, PharmD, MBA

Angela Valadezis Senior Manager, Medical Affairs for Regeneron. Angela has a Doctor of Pharmacy degree from the University of Kansas and a Master of Business Administration from Baker University. With a passion for using evidence-based medicine to guide treatment decisions, Angela has worked with physicians throughout her pharmaceutical career to manage patient care and impact health outcomes. She was named an MSL Rookie of the Year Finalist in 2020 and was named MSL of the Year for Alimera Sciences in 2020.

The Incorporation of the Medical Science Liaison Into the Virtual Advisory Board Process Leads to Optimal Expertise Exchange

July 2022

Medical Affairs Advisory Board Equation: MSL + VAB = OEE

Medical advisory boards, which are comprised of a range of different stakeholders (e.g., external experts, healthcare professionals [HCPs], payers, patient advocate groups, patients, and pharmaceutical attendees), have been utilized by biotechnology and pharmaceutical companies for many years to challenge thinking or provide insight on a given topic or disease area. These advisory boards, bringing together a small number of advisors (6-12), are engaged in gaining medical insights about products either in development or already on the market. This direct consultation with the medical community in this way provides current, real-time information which may identify unmet medical needs and therefore may drive clinical strategies in the future. Assessments on early development programs may provide guidance on clinical trial design, risk management plans, and target patient populations. For a product in phase III/pivotal clinical trials, advisory boards can be vital in interpreting trial outcomes, such as clinical or physiological differences between patient subgroups and descriptive analyses. For a marketed product, advisory boards can assist in the design of post-marketing clinical trials, review and/or recommend medical or patient education programs and provide input for life-cycle management.

Having a clear objective, with actionable deliverables, is the key to the success of an advisory board. It is important to define exactly what the need is, which not only justifies the purpose of the meeting but also establishes the selection criteria for participants and drives the discussion. Typically, the need for advisory boards will be determined and established while developing the annual Medical Plan. Identifying the questions to be asked will aid in completing the Needs Assessment documentation and fulfilling compliance requirements. Effective advisory boards result in positive and impactful relationships with the scientific community. They can be considered a critical activity for Medical Affairs.

The pandemic has accelerated the use of virtual technology and made it a day-to-day necessity. Whether on Zoom, Microsoft Teams, WebEx, or any of a host of virtual platforms, this is the new normal for advisory boards and Medical Affairs, including the Medical Science Liaisons who need to adapt and contribute to the process.

The Medical Science Liaison can have a pivotal role in the virtual advisory setup and execution.

The MSL can maximize efficiency for recruitment. With no spatial barriers to overcome, MSLs can organize a mutually acceptable time for the advisory board, allowing flexibility for attendance without the travel fatigue using the virtual setting. Medical Affairs get the best of the advisor’s attention, and the advisor has the convenience of their own setting. Hence, it becomes a win-win situation for both parties.

Because of the virtual nature, accelerated recruiting is possible. Many times, a vendor is utilized for the administrative aspects of the meeting. The MSL can work with the vendor for optimal communication with invitations, tracking, attendance, and other logistical issues. For a productive, successful agency-client relationship, there must be transparency, authenticity, and understanding between all parties involved. We recommend the invitations begin 4 to 6 weeks ahead of the meeting. This allows for the Key Opinion Leader (KOL) to block their schedule, and complete the administrative collection of documents, including the CV. This allows time for the KOL to complete any pre-reads/related materials.

Depending on the type of advisory board, the MSL may be the moderator or co-moderator with a KOL for the meeting. The MSL may need to learn effective moderating skills before taking on that role in an advisory board. Specific training may be needed for this unique skill. Successful moderators have their audiences’ needs in mind and are focused on listening. It is their advisor’s point of view, experiences, and practices that are interested in discovering and discussing. As the moderator, the MSL must stay focused and concentrate on what’s being said while also thinking of the next question to direct the discussion. Identifying key points and pulling out threads from the Q&A is paramount but often difficult especially when the group gets bogged down in too much extraneous detail that is mostly irrelevant.

It is a skill to politely redirect an important KOL who seems to be going off the discussion track. It is also a skill to change the direction of a conversation while being respectful. Learning to “read the room” is more difficult in a virtual environment. It is important to focus on real-time audience feedback that will help to make subtle or overt changes in style to generate better

discussion. No matter what may happen, the most important goal is to gather the information that is useful and timely. Insights from experienced experts can prevent mistakes and lengthy delays in the use and development of treatments. Importantly, a successful VAB has the KOLs talking, discussing, and engaging; this is not the time for a company to data dump. Overall, the MSL has many tasks to manage—presentation of data and addressing questions while asking key questions, listening to answers, and summarizing the discussion.

While there are many advantages to a virtual advisory board, challenges arise too. During virtual advisory boards, it is more difficult to keep the audience engaged. People lose attention after 45 minutes to an hour and distractions like email, texts, and other activities can interfere. With an exponentially increasing reliance on digital communication tools to connect people together today, the need to listen has never been stronger. The demand for the "better story" is apparent with the competition for attention and increasing therapeutic options. Another challenge can be the technology platform that is chosen. The meeting can become derailed if the connectivity issues arise and are not resolved in a timely fashion.

The MSL can aid in these key elements of success for the advisory board:

- Convenient- by offering the HCP a selection of available times/dates for the advisory board
- Data-Driven- by making sure the ad board participant has materials ahead of time for review and understanding (often called pre-reads)
- Personalized- by selecting HCPs with specific therapeutic area expertise and those treating the right patient population
- Focus on value- by communicating the clinical and/or economic unique aspects, as that will help elevate the information as compelling and relevant

Advisory Boards are not going away with the pandemic and post-pandemic era. The dynamic technology, increasing availability, and more efficient time management with resultant enhanced value will continue to be part of the Medical Affairs landscape. While there are many aspects to this critical activity, the incorporation of the Medical Science Liaison into the Virtual Advisory Board process leads to Optimal Expertise Exchange.

Authors:

Susan Malecha, PharmD, MBA

Susan Malecha is a results-driven versatile medical professional with a proven track record for achievement in the pharmaceutical/biotechnology industry. An accomplished author, she has lectured extensively and is called upon to present the latest developments in the areas of medical affairs for the pharmaceutical industry. Dr. Malecha is an active member of the Healthcare Businesswomen's Association (HBA), and the current President of the San Diego Chapter. She is also Vice-President, Board of Directors, Health Care Communicators of Southern California, and Board Director for California Special Projects Fund for the American Association University of Women. Earning her BS in Pharmacy from Butler University, she completed her Doctor of Pharmacy at the University of Illinois at Chicago and earned her Masters of Business Administration from Keller Graduate School of Management. Dr. Malecha is a certified Etiquette Consultant and is currently the Senior Director, of Medical Affairs at Puma Biotechnology.

Kristie Traverso, BA

Kristie Traverso is an experienced, versatile, and customer-centric industry professional with clinical and commercial acumen focused on the field of oncology. With her 25+ years of pharma/biotech experience, she has held a variety of roles in both the commercial organization and Medical Affairs. In her current role as Associate Director of Med Affairs/ MSL, she works closely with key opinion leaders, manages all aspects of advisory boards, and supports patient advocacy groups related to Medical Affairs.

In-Depth Pharmaceutical and Competitive Intelligence at Your Fingertips With the Intelligent 3P App

July 2022

A drug pipeline is the set of drug candidates held by a pharmaceutical company that is collectively going through discovery or under development at any given point in time. A drug pipeline may be restricted to a particular therapeutic area (TA), drug class, or extended to the drug discovery process; research and development pipeline (R&D). Pharmaceutical companies usually have a number of different drugs/compounds in their pipelines which is an important indicator of the value, company size, and future prospects. A drug pipeline can include new drugs, variants of existing drugs, and new applications of existing drugs (for different indications).

A drug pipeline starts with new drug discoveries and it is important to assess companies' ability to discover new drugs and address unmet medical needs, as well as drugs that are currently in the pipeline. The continued evolution and longevity of a TA is dependent on its ability to keep churning out breakthrough new drugs and turning them into commercial successes backed by a growing body of clinical evidence, and by refilling the early stage of the pipeline as drugs move up. There is a mountain of drugs waiting to hit the market and keeping up with their information can get quite challenging.

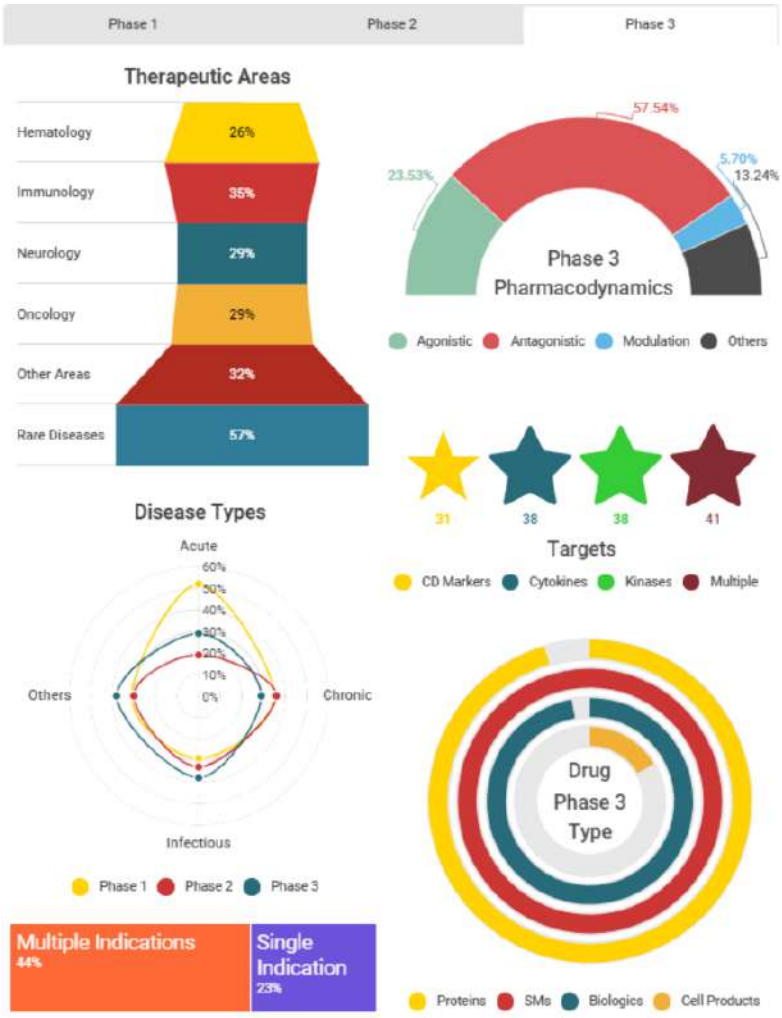
Medical Affairs teams seek to capture a more complete picture of a drug pipeline, be it for competitor intelligence or for an overall TA understanding. Moreover, in order to effectively gauge the potential clinical and economic impact on patient outcomes and healthcare systems, monitoring drug pipelines has become an essential function. Various methods have been used over the years, some simple while others complex, essentially to augment current processes to monitor new/existing drug developments and to answer some crucial questions noted below:

1. Is it a novel therapy?
2. Is it an expanded indication?
3. Is there a generic product that may impact another therapy or class of therapies?
4. Where will it fall in therapy – will it be first-line with significant advantages over the standard of care, or is it another drug offering little difference compared to therapies already on the market?
5. What safety and efficacy data can be gleaned from the available clinical trial results?
6. What designations has the therapy received that may lead to earlier-than-expected approval?
7. What is the latest innovation in providing access and insight into the formulary decision-making process?

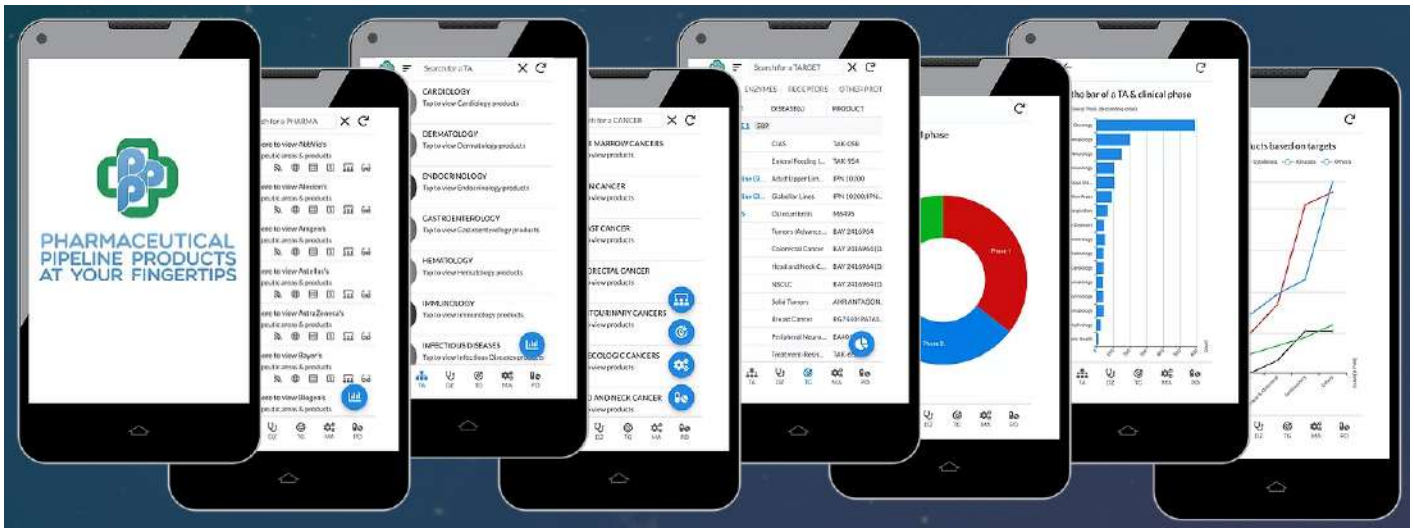
More people are doing their daily personal and work activities on their smartphones for the undeniably growing benefits that

come with its use. This is resulting from the ongoing tremendous transformation of technology, and mobile apps have become a colossal point of attention; users rely on them in more than one way. Imagine navigating through the product pipelines of multiple pharmaceutical companies and tracking thousands of medicines under clinical development with a smartphone app. Wouldn't that be a *time-saver*

3P (short form for Pharmaceutical Pipeline Products) app is intelligently created and designed to gain in-depth pharmaceutical pipeline "digital" information at your fingertips. It is a one-stop portal to avoid reviewing multiple data feeds, separating the sheep from the goats, and preparing all the necessary summary data. It provides up-to-date information on pipelines of drugs in clinical development across multiple pharmaceutical companies and TAs in a simple summarised format (see examples below; created with data from the 3P app and infographics platform Infogram).

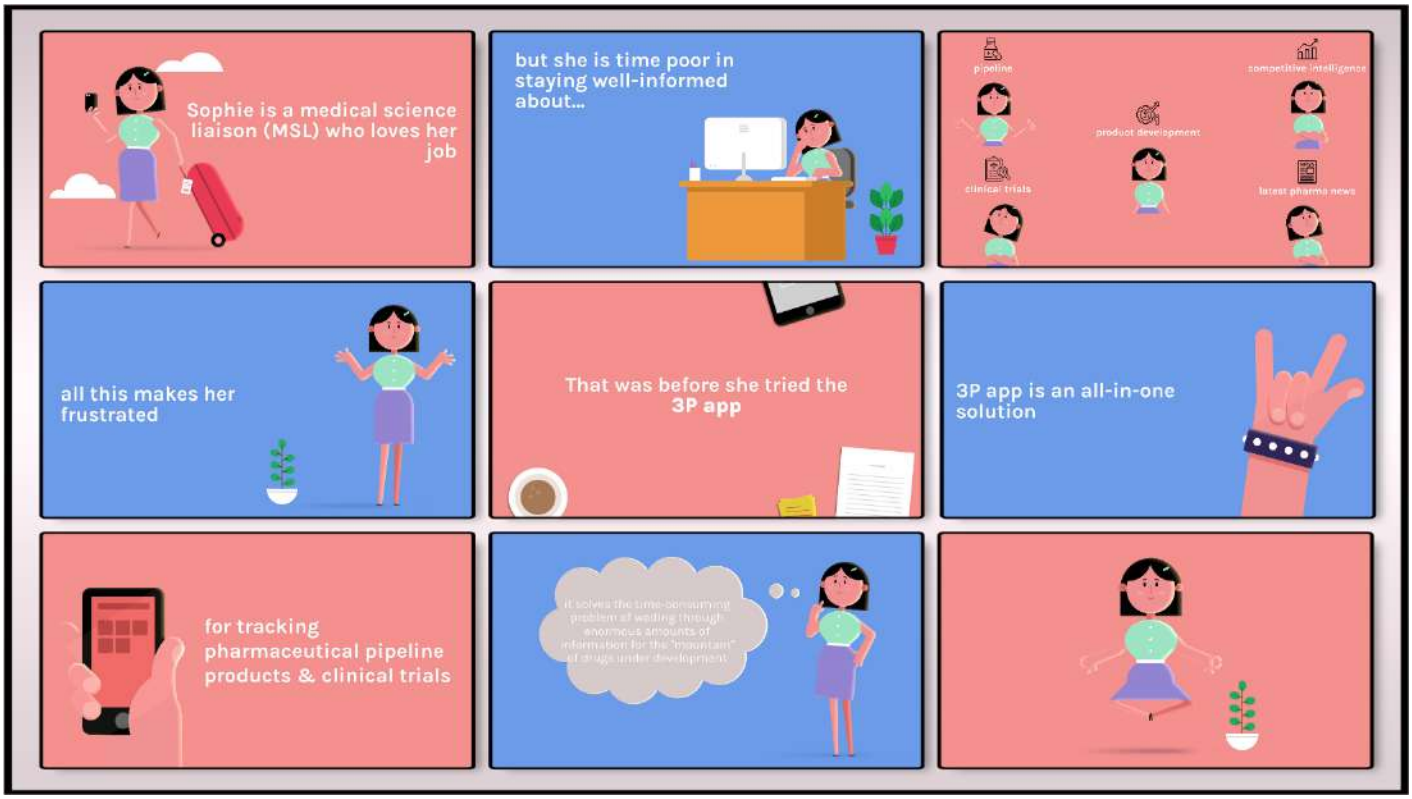


The information on the 3P app is collated from public domain sources such as company websites, press releases, clinical trials websites as well as various news outlets focusing on pipeline products. It is solely developed for informational purposes and is independent of any pharmaceutical company's involvement or influence. It is an everyday resource for pharmaceutical professionals across multiple streams and capacities to gain quick and nifty intelligence, benchmarking, upskill with a broad clinical trials landscape, and meaningful pipeline product coverage. It gives you the power to search the way you want, whether you're just browsing or want to filter a search by pharmaceutical company, TA, disease, drug target, or mechanism.

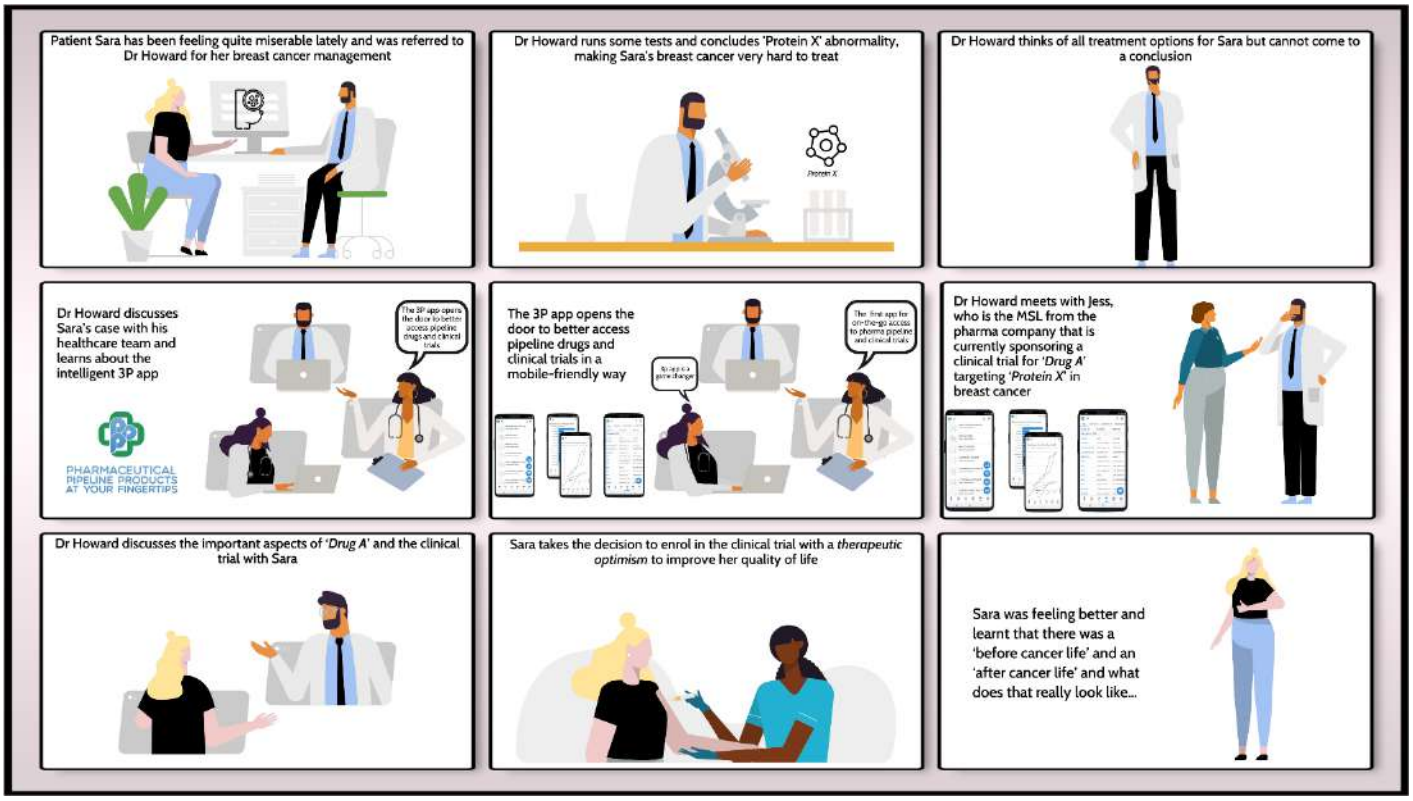


This vital information is especially useful for Medical Affairs personnel including MSLs, Medical Managers, Medical Writers, Health Economists, Medical Leads, and Medical Directors. An MSL has a plethora of roles of which a few primary roles include keeping abreast of the latest research and new developments in their area of therapeutic expertise and having a clear understanding of the clinical research process, including product development, clinical trials, and approval for consulting. Staying up to date with the current pharmaceutical pipeline and market overview is paramount for constant learning and educating stakeholders, both external and internal, and the 3P app very efficiently helps in achieving this aim. Below are some unique use cases which illustrate how the 3P app helped MSLs in their daily activities to achieve better outcomes for both KOLs and patients (names have been fictionalized for privacy reasons).

In this use case, Sophie who is an MSL uses the 3P app and is able to stay well-informed about pipeline and clinical trials data for a market overview and competitive intelligence.



In this use case, Jess who is an MSL was able to make contact with a new KOL who used the 3P app for getting information on a clinical trial sponsored by the pharmaceutical company where Jess works.



In this use case, Samantha who is an MSL was able to collaborate with a hospital multidisciplinary team to achieve a rewarding outcome for a severe Multiple Myeloma patient.

In conclusion, the 3P app will provide you with an up-to-date pipeline and competitive intelligence information. My hope is that this app will open doors for everyone to better access the world of information for pharmaceutical pipelines and clinical trials. This vital information can unlock access to drugs in development, raise awareness of new therapies and provide insights into strategic decision-making related to R&D and business development.

For further information about the app and app store links to download, please visit www.app3p.com. Alternatively, you can also email us at support@app3p.com if you may have any questions/comments.

Author:

Amit Lalwani, PhD, MBA

Amit has been in the pharmaceutical industry for over two years in multiple roles and has been a medical science liaison since 2021. Prior to joining the pharmaceutical industry, he has 10+ years of experience in the medical and clinical research industries across different therapeutic areas managing bench side to bedside projects. Recently he has developed a mobile app (iOS and Android) that provides curated and up-to-date information on pipeline products from multiple pharmaceutical companies. He developed this app as a personal entrepreneurial project without the involvement of any pharmaceutical company(ies), to help pharmaceutical industry professionals across multiple streams to be updated with clinical trials and drug pipelines. He is always proactive at building and sustaining strong relationships to increase scientific and clinical knowledge of pharmaceutical products, gathering, and evaluating information to facilitate optimal information knowledge and retention while remaining up to date on the latest industry trends, regulatory, and competitive intelligence.

Positioning Yourself to Become a Medical Science Liaison in 2022 and Beyond

July 2022

After attending the MSL Society's 9th annual conference in Las Vegas in December 2021, I took some time to reflect on various inquiries our team received about how to effectively step into the MSL role from a clinical, academic, or research background. The industry is a tough nut to crack, but it is absolutely possible. **The true keys to breaking into the MSL role are positivity, perseverance, preparation, and being intentional in your job search.**

Here are a few insights I have compiled and picked up over the years, as a former MSL/Medical Affairs recruiter and current client-facing Director at the Carolan Group:

- **Play to your clinical and scientific strengths. Position yourself as a scientific expert and target jobs that align well with your area of therapeutic expertise.**

- In lieu of prior Field Medical experience, pharma companies will sometimes "bend" to hire a scientific expert in a specific therapeutic field that would be turn-key, in terms of understanding the science.
- For example, if your entire research background is in Cardiovascular Disease, it would be best to prioritize seeking out opportunities (and companies) specifically in CV or Metabolics, as it makes the most natural fit for both parties.
- On the other hand, if you have practiced as a BCOP-qualified Oncology Clinical Pharmacist for the past 8 years, you should target Oncology MSL roles that align with your specific expertise in Solid Tumors or Hematologic Malignancies.
- Use your specific scientific background to your advantage, and be deliberate and intentional about the roles you are pursuing and applying for.

- **Consider targeting larger, well-established organizations with solid infrastructure, resources, and more substantial field teams. Many of the aspiring MSLs I went on to place as a recruiter landed at some of the largest pharma and biotech players.**
    - Many larger companies can offer more resources and infrastructure to a newer MSL than biotech in a strong "growth mode" with roughly 50 employees that are moving fast and furious. It is often a smart move to target larger organizations that have well-established programs, as they are more likely to have the bandwidth to hire a scientific expert (a PhD, PharmD, or MD) that has the clinical/scientific piece down pat but might need some ramp-up time in the field.
    - Larger organizations also tend to offer a longer, more comprehensive training period and potentially a mentorship program to get new MSLs caught up to speed. For example, if you are an MSL on a team of 14-16 MSLs nationally, it is more likely that you will have great support and will have a smaller territory to get acclimated to.
    - Smaller pharmas and biotechs should not be discounted, but they very often seek to hire more experienced MSL candidates that can hit the ground running in the field.

- **Consider a contract MSL role as your first Liaison role.**
    - Contracts are a great way to begin a long and fruitful MSL career. Again, it is best to target teams that align very well with your scientific background. You can also consider Community Science Liaison roles, which entail many of the exact same responsibilities – but entail calling on community physicians and practices.

- **Play the long game and consider a different Medical Affairs position as a "stepping stone."**
    - It is far easier to pivot within the industry when you are already IN the industry. Do not discount different opportunities to step into the industry and build your career from there. Many MSLs that I know started their career in an ancillary role, such as a post-doctoral fellowship or an in-house position in Medical Information or Scientific Communications.
    - There is a WEALTH of opportunity within the industry, and it is sometimes the best option to start in an ancillary Medical Affairs department or position, in order to get a stronger foundation to move into the MSL career.

- **Pack as much scientific information and "meat" into your resume or CV as possible.**
    - Again, in order to position yourself as a solid prospective MSL candidate, you have to position yourself (both verbally and on paper) as a scientific expert. You should be careful to add enough detail regarding the science, clinical trials, research, or clinical/patient care work you have been involved in.
    - Be sure to include:
        - Your publications, abstracts, presentations, scientific affiliations, etc.
    - If someone finishes reading your resume or CV and does not have a strong sense of your therapeutic background, body of work, or accomplishments, you will want to think about adding more detail and better positioning yourself on paper.

- **Do not step into an MSL interview with a tenuous, surface-level understanding of the role.**
    - If an HR person – or worse, Hiring Manager – gets the impression that someone does not fully understand the 'ins' and 'outs' of the MSL position, they will NOT be moved forward.
    - It's very important to do your due diligence before an interview – even if it's just the first "screen" –

and to impart a strong understanding of the day-to-day responsibilities that MSL work entails.
    - The good news is there are many resources available to help!
        - You can do independent research online, join a great professional network like the MSL Society, ask qualified MSLs for a bit of their time for an informational interview, or partner with a trustworthy MSL/Medical Affairs recruiter to help you navigate the interview process.

MSL interviews are hard to get, so make sure to capitalize as best you can, if you do win the opportunity to meet with an HR member or Hiring Manager.

- **In addition to understanding the MSL career in general, make sure you have done your homework on the job and company you are applying for.**
    - Research the territory and think about access. Do you have any connections at key institutions or medical centers in the states associated with the territory? Do you have any pre-established KOL/HCP relationships that you can bring to the table?
    - Be prepared to explain your "why" – why you make a good fit for the position, why your background aligns, and why you are genuinely interested in the organization.
    - Thoroughly research the science and clinical pipeline. Does your background have any parallels to the company's science? Have you utilized any of their products in a clinical setting?
- **Utilize your professional network.**
    - Regardless of industry, people still often get jobs through connections – whether friends, colleagues or former managers. As a recruitment firm, we so often get the news from companies that they've decided to go with an internal referral, as opposed to an outside candidate that they are not as familiar with.
    - It is important to utilize any industry connections you have (as appropriate). The hope is that they'll be able to get your CV/resume into the hands of a decision-maker.
- **Partner with a Medical Affairs/MSL-focused recruiter that you find honest, trustworthy, and helpful – and that gives you a good gut feeling.**
    - All bias aside (being in recruitment at the Carolan Group), the benefit of working with a good recruiter is their ability to be a true partner to you. A great recruiter will offer you advice on your CV/resume, will help you prepare for interviews, will maintain a steady flow of communication, and should coach you every step of the way.
    - Recruiters should also be able to get your information into the hands of the right, key decision-makers – whether the HR person working on the position or the actual Hiring Manager.
    - **Word of caution** – not all recruiters are created equal! You should trust your gut in your interactions with a new recruiter – if they give you any red flags, you should look elsewhere.

Wishing everyone tremendous success throughout 2022 and beyond!

Author:

Bridget Rasmusson

Bridget Rasmusson serves as the Director of Client Services & Operations at The Carolan Group. Bridget has been working in Medical Affairs since October 2016, originally starting her career on Tom Caravela's team at The Carolan Group as an MSL/Medical Affairs Recruiter. After over three years in that role, she moved over to client management and now interfaces with all pharma and biotech Hiring Managers/HR personnel. Bridget's former background includes experience as a Writer and Proofreader, as well as a Bachelor's degree in English Literature.

Flexible Work and Universal Design for Medical Science Liaison Diversity and Inclusion

July 2022

Introduction

I took a sustainability and corporate social responsibility course during my Master of Business Administration (MBA) from Arizona State University. The focus of the course taught by Dr. Reynold Byers was on profitability, increasing a firm's sustainability, social responsibility, and the triple bottom line: people, planet, and profit (PPP). For a class project, I explored diversity and inclusion (D&I) issues for medical science liaisons and proposed solutions for flexible work and universal design as a strategy to improve the engagement of neurodiverse medical science liaisons. Neurodiversity is a non-pathological variation in the human brain regarding sociability, learning, attention, mood, and other mental functions. This topic is a subset of a larger discussion of D&I. In this article, I provide an overview of D&I in STEM careers, challenges in MSL retention, explain some issues neurodiverse employees face, and propose some potential approaches to address challenges in the workplace for success and fulfillment. I have updated and summarized the class project for the MSL journal and excluded return on investment (ROI) calculations on employee retention. Tools for ROI can be found in the Society for Human Resource Management and other online sources.

Diversity and inclusion in STEM careers

Retention and D&I in the MSL career are part of a broader issue in the STEM workforce. MSLs remain with a particular employer for an average of two years. On the other hand, four years is the average tenure of employees across all industries in the private sector [1]. The reasons why MSLs choose to leave jobs include: micromanagement, lack of transparency, poor communication of the company priorities and agenda, lack of understanding within company leadership regarding the role of the MSL role, and lack of career development opportunities. Furthermore, many MSLs feel undervalued; their skills are underutilized and inadequate

training and tools to conduct their activities are frequent issues. Hiring new MSLs due to turnover costs money for recruitment and training. The remaining employees tend to be less engaged and become less productive because of observing attrition.

In the STEM workforce, there are disparities among Black/African Americans, Hispanics or Latinos, and American Indians or Alaska Natives in science and engineering fields [2]. Problems of sexual harassment remain prevalent, with up to 50% of women in male-dominated STEM environments reporting some form of discrimination [3]. Among black women, the barriers are even steeper compared to white women, and they are significantly undervalued. According to one study, 13% of whites, 42% of Hispanics, 44% of Asians, and 62% of blacks (men and women) in STEM faced racially motivated discrimination [3]. Among women, the range of discrimination suffered included: "*earning less pay than male colleagues (29%), treatment as incompetent (29%), repeated slights (20%), and less support from senior leaders compared to males in similar roles (18%)"[3]*. These subtle inequities, like dismissiveness, tone, and body language, severely impact employee morale, engagement, productivity, and psychological safety. A less recognized issue in STEM is that about 10% of employees report one or more disabilities, including difficulties in hearing, vision, cognitive ability, ambulatory, self-care, or independent living [2, 4]. Disability status does not necessarily limit educational attainment or workforce participation; these groups can lead productive lives with or without reasonable accommodations.

Neurodiversity

In recent years there has been more awareness about neurodiversity in the workplace. It is estimated that 15 to 18% of the population is neurodivergent [5]. Many conditions fall under neurodiversity, including attention deficit hyperactivity disorder (ADHD), dyslexia, and autism. Neurodiverse employees may suffer from significant daily living challenges. These challenges may include organization, time management, priority setting, reading, writing, and memory problems (**Figure 1**). These issues can lead to stress, mismanagement of workload, inconsistent and inadequate performance, and a high level of attrition [6-8]. However, studies have shown that tailored support improves self-confidence, self-awareness, and a general feeling of more control of their work, all leading to improved work outcomes [6].

Furthermore, neurodiverse individuals may have essential skills that should be harnessed in the workplace. Along with their shortcomings, many have significant gifts, including creativity, unique problem-solving abilities, and communication skills (**Figure 1).** These skills have been identified as highly desirable for the workforce of the future [9]. Hence supporting this segment of employees within a broader agenda of D&I is desirable. Several large organizations, including Microsoft, SAS, and the military, have neurodiversity recruitment programs.

Figure 1 Strengths and challenges of neurodiversity

Source: https://sangerinstitute.blog/2020/04/03/raising-awareness-of-neurodiversity-in-the-scientific-workplace/

Credit: Professor Sara Rankin

Proposed Solutions

To address some of the challenges faced by neurodiverse employees, I proposed some potential solutions. Sustainable workplace processes and industry buy-in for MSLs based on universal design principles can improve employee engagement and retention and meet the needs of neurodiverse employees. Some proposed solutions include:

(1) Advocating for corporate buy-in for emerging issues in D&I based on universal design principles

(2) Improve MSL engagement and retention by developing approaches to implement flexible work and support productivity, time

management, and self-efficacy of neurodiverse MSLs

(3) Provide support for the MSL to pursue socially responsible projects which add value to the community

(4) Identify or develop metrics to measure outcomes of programs and impact based on the triple bottom line

I elaborate further on each of these proposed solutions

Universal design principles

Universal design is an approach for making products, environments, operational systems, and services welcoming and usable to the most diverse range of people possible. It is based on simplicity, flexibility, and efficiency[10, 11]. It has been demonstrated that universal design can optimize employee productivity, safety, collaboration, and communication. Universal design is based on seven principles

1. Equitable use
2. Flexibility of Use
3. Simple and Intuitive Use
4. Perceptible information
5. Tolerance for Error
6. Low Physical Effort
7. Appropriate Size and Space for Approach and Use.

By its very nature, the MSL role as a remote worker with a high degree of autonomy is highly adaptable to universal design and tailoring to meet the need of a diverse workforce

Flexible work

It has been reported that work scheduling flexibility and location is becoming as important as pay to recruit and retain talent. Also, flexible work has been shown to increase staff retention, and productivity and ultimately provide a competitive advantage to companies[11]. In a remote role, MSLs have more flexibility with their work compared to other careers. However, additional formal arrangements can be considered depending on the mutual needs of the companies and employees. Examples of flexible work arrangements include contract employment, part-time work, 75% employment, and unpaid leave. These arrangements can benefit many types of employees who want mental health or education breaks and allow companies to retain their employees. Various organizations, including the Americans with Disabilities Act, Job Accommodations networks, and The Society for Human Resource Management [12], have different toolkits for implementing flexible work arrangements.

(3) Provide support for the MSL to pursue socially responsible projects which add value to the community

At the core of corporate social responsibility is service. Many companies have formal service programs. In addition, many employees, including MSLs, have individual initiatives and social citizenship that bring value to their community and provide a sense of purpose beyond work. Flexible schedules can give adequate time to pursue these things. Furthermore, many MSLs have medical and research qualifications, hence can provide service beyond the MSL role to their community, for example, adjunct faculty at a university, substitute teacher, high schooler mentor, international missions, emergency medical technicians, taking occasional shifts as a community pharmacist or medical doctor. Having highly qualified MSLs be visible in community leadership positions and involvement in professional organizations can bring mutual value to the MSLs and the companies they work for.

(4) Identify or develop metrics to measure outcomes of the program and impact on the triple bottom line.

For any recommendations to be sustainable, the company and the MSLs need to see that any initiative is working. In a corporate setting, the additional indicators for success will include a quantitative assessment of the impact of improved MSL engagement and retention on the company's bottom line. There are several ways to measure employee engagement and return on investment. One approach suggests a nine-step engagement model that starts with alignment to business needs and ends with measuring the impact of the model on the business [13] **Figure 2.** In addition, incorporating MSL performance metrics based on typical activities of the MSL would make the engagement model more role-specific. Currently, no standard MSL metrics are used in the industry, and how MSLs are assessed varies depending on the company. However, an interesting metric I found is the "*slugging percentage model to cover all MSL bases"[14].* Though unusually highly detailed, some aspects of this may be particularly valuable for neurodiverse and socially responsible MSLs, including a rating on activities regarding company values

and an assessment of behavior.

Figure 2 Modified engagement model[13]

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https://www.linkedin.com/pulse/slugging-percentage-model-cover-all-bases-medical-msl-mikhelashvili/.

Appendix

Slugging percentage metric

https://www.linkedin.com/pulse/slugging-percentage-model-cover-all-bases-medical-msl-mikhelashvili/

	MSL #1			
PERFORMANCE (Sets)	Q1	Q2	Q3	Q4
Primary Metric: - MSL reported & validated by Director **1. Total Points – Total MSL Outcomes (Total Bases)** Secondary Metrics: - 1 or more from below may be selected and averaged to w/ Primary Metric: a) Outcomes/Attempts (**Plugging %**: Total Bases/All Bats) b) Attempts (All-Bats) c) Discussions/Interactions (Efficiency) d) Target/Non-Target Interactions e) Routine (in office) vs. Non-Routine (out of office, disconferences, etc.) Interactions f) Days of In-person Interactions/week (consistency) g) In-person Interactions/Days				
2. MSL Management Performance Survey Feedback - 10 Questions, each question: 5 points (50 point total maximum) - Responses in 1 – 5 scale with mixed value: 1 being most positive in some questions with a 5-point value, and 5 being most positive in other questions also with a 5-point value - Multiple surveys by MSL Management and MSL Project Supervisor if relevant may be conducted and averaged into a score out of 50				
3. KOL Survey Feedback - 5 Questions conducted anonymously by a third party if 10 points each (maximum 50 points) - Responses in 1 – 10 scale with mixed value: 1 being most positive in some questions with a 10-point value, and 10 being most positive in other questions also with a 10-point value				

Author:

Eyitayo S. Fakunle, PhD, MPH, MBA

I am a senior Medical Science Liaison at Covis Pharma. I have been in this role since July 19th, 2021. Covis Pharma is a global specialty pharmaceutical company in multiple therapeutic areas. We are growing in the respiratory space with recent

acquisitions of drugs for treating COPD. Covis values Diversity and Inclusion and recently launched our D&I initiative. I am among the nine global employees serving on the D&I council. Council members serve as leaders responsible for representing the "voice" of both their function and the global employee base.

Overall, I have seven years of experience in medical affairs/medical science liaison in my career across companies. I have previous experience in cell therapy and regenerative medicine, stem cells, orthopedics, and cartilage repair. At Covis, I am gaining experience in respiratory supporting our Asthma and COPD portfolio.

Beyond work, I am pursuing a social venture named "I am Pluripotent" to provide after-school STEM learning opportunities for girls and diverse youth to prepare them for future STEM careers. I launched "I am Pluripotent" in the summer of 2021 as part of the Venture Devils Program of Arizona State University. The project is organized as a small business startup for which I am the founder and owner. I plan to continue every summer to provide fun learning opportunities to youth, and I hope to grow it in the future to provide opportunities to a larger audience.

My First Year as an MSL- Easy as Pound Cake

July 2022

At the start of the pandemic, April 2020, I was offered my first medical liaison role. I had been a Hematology/Oncology Physician Assistant for 13 years and was excited to start my new career in Medical Affairs. Adapting to virtual onboarding and virtual scientific engagements, were some of the barriers that I encountered in my job transition. Prior to COVID, my favorite pastime and stress reliever was cooking and baking. My grandma taught me her secret pound cake recipe over 20 years ago. (Specifically, I am known for making specialty pound cakes.) Her recipe helped me get through my first year as a medical liaison. Here are some of the most important instructions:

Start with a cold oven. The perfect pound cake starts with a cold oven. At the start of a new position, a Medical Science Liaison (MSL) receives a target list of potential health care providers (HCPs) and key opinion leaders (KOLs) in their territory. The MSL must take ownership of mapping and building their territory. This could involve a multitude of unreturned "cold" calls and unanswered emails when asking for an initial meeting. Collaboration with commercial colleagues can help identify major accounts and KOLs in the territory.

Plan ahead and read the recipe. By reading the recipe prior to starting, you ensure that you have all the necessary ingredients and tools to make the cake. In addition to territory mapping, pre-call planning is essential to being a successful MSL. After my first meeting with a major KOL, I followed up by sending literature for review. Unknowingly, I sent a copy of an article that the KOL co-authored! Pre-call planning involves knowing who you are meeting with, what their interests are, and what you plan to discuss. Now, prior to every meeting, I research the KOL using resources like Google, LinkedIn, PubMed, and Twitter.

Use quality ingredients. Choosing low-quality ingredients can affect the taste and density of the pound cake. New MSLs may get caught up on metrics and target specific listening priorities. The focus should be on quality interactions that provide the KOL with the information that is pertinent to them. When you focus on quality versus quantity, you create impactful relationships with KOLs. Those impactful relationships could then lead to an interest in advisory boards and research studies. An MSL once told me that if you focus on quality engagements, the metrics will follow.

Don't add all your ingredients at once. My grandma warned me not to add all the pound cake ingredients to the bowl at once. She advised that alternating adding eggs and flour to the batter leads to a fluffy and moist cake. An effective MSL does not "data dump". You do not give KOLs information, just to give information. Additionally, do not provide your KOLs with all of your scientific information on your first engagement. (Don't put all your eggs in one bowl and hand them to the KOL.) Always confirm the KOL's interests and secure a date and time for a follow-up engagement.

Baking is a science, follow the recipe. You must follow the measurements in the recipe. If the measurements are altered, this could lead to pound cake that will not rise. MSLs must know their compliance rules. Any missteps could be detrimental to the company or the MSLs career. Of importance is knowing how to navigate KOL engagements and commercial encounters compliantly.

Add some flavor. My grandma's secret recipe is for a plain cream cheese pound cake. I took her basic recipe and added different flavors, creating strawberry, key lime, and several other flavors. MSLs are provided with general decks and scientific literature; however, they can choose how to disseminate that information. You should not just read your slides or spew out statistical data. You should use your own style and make the engagement conversational. You should think about what makes you stand out as an MSL and what makes KOLS want to engage with you. To be honest, after two years, I am still developing my own personal brand as an MSL.

Don't open the oven multiple times. Opening the oven door allows heat to escape the oven, which will lead to your pound cake dropping and falling flat. MSLs should cultivate their relationships with KOLs. At the start of the relationship and periodically, MSLs should confirm the KOL's desired cadence of meeting. Some may want to meet monthly while others may want to meet twice a year. It is important to not overextend your requests for meetings. However, leaving a cake in the oven too long leads to a burnt cake. Be patient, it takes time to cultivate relationships.

Look at other recipes. My grandma perfected her recipe by asking others how they made their poundcake. She was receptive to their techniques and applied them to her own recipe. As an MSL, you are a constant learner. Whether you have been an MSL for 2 years or 5 years, you can always improve your craft. Since I started my medical affairs position, I have listened to podcasts and followed Medical Affairs groups on LinkedIn. I attended my first MSL Society Conference and found it beneficial for new and seasoned MSLs. I polled seasoned MSLs to learn how I could improve securing KOL engagements. My newer teammates have shown me how to use Microsoft One Note to enhance my KOL pre-call planning and Google Maps for effective territory mapping.

My first two years in Medical Affairs have been a mixed bag of treats. Keeping my grandma's recipe in my mind will surely help me as I grow into the role. Now I am off to ask her how to make chocolate frosting from scratch.

Author:

Letitia Price, DMSc, MCMSc, PA-C

Letitia is a Hematology Community Medical (CML) at Syneos Health contracted with GSK. She has 13 years of experience as a Hematology/Oncology physician assistant. She became a CML in April 2020. In January 2021, she received her Doctorate in Medical Science from Lynchburg University. Letitia is a Breast Cancer Awareness Advocate and spends most of her time fundraising for breast cancer. She is a Florida State University Alum and a die-hard Seminole Fan. Considering herself an avid foodie, she loves to bake, cook, and travel. Her grandma, Alberta, recently celebrated her 90th birthday and continues to bake pound cakes to this day.

Organizing a Successful Medical Advisory Board

July 2022

The primary function of medical advisory boards is to provide consultation to the company on core topics of high interest related to the product. The strategic output sought at an advisory board will likely vary based on the phase of the product in its life cycle, which could include:

- a pre-launch advisory board to assess the clinical development program (what the data means and how to best present it)
- an at-launch advisory board to maximize medical education and impact
- a post-launch advisory board to assess clinical experience with the product
- an evidence-generation planning advisory board at any life-cycle phase

Planning for an optimal advisory board experience is critical to assure business objectives are met as outlined in the needs assessment for the advisory board, as there will undoubtedly be a need to package and debrief after the advisory board with internal stakeholders. The needs assessment should clearly state the objectives of the planned advisory board and align with the medical objectives.

In the past six months, I've participated in four medical advisory boards for two separate products; for that fourth advisory board, I was tasked with being the primary organizer. This is what I've learned about organizing an advisory board:

First and foremost, understand company objectives for holding the advisory board before deciding who should be invited. If the company seeks high-level advice on medical strategy for their product(s), then nationally recognized Key Opinion Leaders (KOLs), with in-depth research experience in the desired disease and treatment landscapes, would be the most appropriate invitees. Alternatively, the company may wish to better understand the "on the ground/ in the trenches" use of their product(s); in this case, it would be more appropriate to invite clinicians (aka regional or local KOLs) who spend most of their practice time in direct patient care. The choice of whether to include advisors based on education level or therapeutic specialty will be based on company preference and/or clinician availability.

Following this understanding of the strategy and the types of KOLs that should be invited, select and add attendees to this advisory board, with the intent of maximizing the board seats, with at most fifteen advisors. Beyond fifteen advisors, it can be difficult for individuals to sufficiently and thoughtfully express their opinions in an allotted time. For advisors who are particularly valuable to the company, prioritize aligning their availability with the timing of the advisory board; this often requires sending out invitations at least three months in advance. KOLs should have a reputation for being able to comfortably and respectably speak within a group of peers. Holding the advisory board near the time of a largely attended national meeting may be convenient for many key advisors. Also in advance of the meeting, consider sending pre-reading material to prime the discussion of key topics. Of note, the inclusion of pre-work will be company-dependent, as this factors into the needs assessment and FMV (fair market value) calculation for KOL time and payment allowance for the advisory board program.

Amongst the particularly valuable advisors, the company may wish to invite one advisor to act as the chair of the meeting. The chair is likely a KOL who has worked with the company in the past, on research, consulting, or speaking engagements, and has a strong familiarity with the product. In terms of tasks, the chair (or moderator) would be expected to open and close the meeting, present data on the product, and steer the conversation towards answering the company objectives; in terms of personality, the chair should be someone who has fluency in the primary language of the meeting, holds the respect of most other advisors in the room, and has the wherewithal to ensure that all attendees have a chance to speak. The company may also wish to have an in-house representative co-chair the meeting.

After deciding upon the desired attendees and chair, next decide upon where to host this advisory board. While the overarching destination should be accessible, by car or by a major airport, it also should be both a reputably safe and desirable location. The program cannot be held in a hotel or venue that could be considered a luxury or entertainment-oriented, such as a casino. KOLs may seek to tack on a few hours of sightseeing at their own expense if they have taken the time to travel to an advisory board. The location of the advisory board is often within a private hotel conference room; ideally, this conference room should have closed walls/doors to ensure confidentiality of the discussion. Having a conference room with windows is preferable for advisor mood and energy, especially if the advisory board is an all-day event. If catered meals will not be provided during the event, ensure that there are multiple proximal options for obtaining food so that time away from the meeting is minimized.

Consider whether the advisory board will be recorded and if so, assure audio-visual equipment support and set up. Regardless of whether the program is recorded, someone should be tasked with taking notes at the advisory board session, as this is a requirement for all advisory boards. Some advisory boards may opt to publish the proceedings of meetings.

One or two days before the advisory board commences, email the advisors the key logistical details so it is easy to locate within their inboxes. In this email, provide advisors with multiple ways to easily connect with on-site contact for any last-minute questions.

Keeping these advance planning tips in mind will help you to orchestrate vital discussions at your next advisory board.

For details on executing the advisory board on meeting day as well as debrief strategies, please see Part II of this article in the next MSL Society Journal.

Author:

Elise Fields, PharmD

Elise is a Seattle-based Medical Science Liaison (MSL) working for Syneos Health on the Acerus project. Prior to becoming an MSL in 2020, Elise worked directly with underserved patient populations, overseeing a diabetes team and clinical pharmacy programs. She graduated from the PharmD program at the University of Washington and was the first pharmacy student to concurrently complete a certificate in Global Health. She completed a hospital residency and holds board certifications in pharmacotherapy and diabetes education.

In her spare time, Elise hosts a podcast that raises awareness of fertility research.

Pearls of Wisdom for Overcoming Challenges as an MSL

July 2022

As a seasoned professional, life has given me several opportunities for challenges and successes. I want to share a few pearls of wisdom I gained during one of the most challenging times in my professional career and personal life with the intention that I may provide hope for others.

Having earned a PhD in Neurobiology and Anatomy at Wake Forest University and completed postdoctoral research at Georgetown University in the Department of Neuroscience, I soon came to understand my gifts for a career were better suited where my personality would flourish. For almost a decade I enjoyed being a facilitator in the world of intellectual property, bridging science to industry, and building key relationships. Beginning with a fellowship at the NIH Office of Technology Transfer, followed by a short time as a Patent Examiner at the USPTO, I spent most of my time as a Licensing Manager in the Office of Technology Transfer at George Mason University. I thrived in conveying cutting-edge technologies to patent attorneys and potential investors, but I craved seeing how technologies would impact patients in real-time. I began moonlighting as a "scientific liaison" in clinical settings for industry, and eventually, I found my first functional role as a medical science liaison with a different title.

I began my journey as a medical liaison in the world of autologous biologics, using stem cells and growth factors within a patient and transferring that tissue to another location for healing in the same patient. There were multiple clinical applications for this, but mostly the market was focused on orthobiologics and spine fusion. The first company I worked for was such a positive

experience that I have remained friends with many of them. In fact, the two national sales managers and I all moved to a new division of another company in orthobiologics. I was the sole clinical scientist, functioning as a medical science liaison, supporting sales and marketing for their scientific needs, and building relationships with key opinion leaders. In order to improve my skills, I took the presentation skills workshop with the Medical Science Liaison (MSL) Society. I distinctly remember the moment I realized that I had "arrived" as an MSL. It was during a presentation I delivered at the Seattle Science Foundation in February 2017 to world-renowned spine surgeons. I had mastered the literature and current clinical practices in orthobiologics. Here I was, truly an expert, and conveying valuable information to these surgeons, helping them critically think about treatment approaches with their patients. Little did I know that I was about to become a patient myself in a way I never could have imagined.

In April of 2017 I was diagnosed with stage I breast cancer. I got the call in the middle of a business meeting. My son was only 2.5 years old, and I was a full-time single mother. Shock, terror, and disbelief can't even begin to describe how I felt. Things at work had been extremely challenging. I was constantly at odds with the marketing department to the point where it was an outright toxic and abusive environment to work in, every … single … day. I tried to help educate the company about the role of an MSL by bringing in the MSL Society leadership team during this time. I had also thought about leaving for over a year, but I kept telling myself that I should hang in there. I thought I could prove my position and that someone would see what was happening in the company. Well, one month before I would have been vested in February 2018 my position was terminated. I was only halfway through my chemotherapy with another six months to go. How could they do this? "I have cancer and a three-year-old!" I cried with tears running down my cheeks in the office of human resources that morning. I was asked to leave by the end of the day, only I had to clean out my desk by noon because I had chemotherapy that afternoon. I was at the bottom. I broke down. I had built a body of knowledge in my field for 5 years, and it felt like my professional identity was being stripped away, on top of surgery, radiation, medically induced menopause, losing my hair, and enduring a year of chemotherapy.

Within a couple of months, a friend led me to a position as a feasibility analyst with a clinical research organization. I gladly accepted the job, with a 20% pay cut. As happy as I was to take the position, I soon realized that I was over-qualified. I was accustomed to quite a bit of autonomy, running the show for my projects, traveling, participating in strategy development, and reporting to upper management for such a long time. Still, I just had to show up every day in my cubicle and do the best I could. I even recruited my former classmate from graduate school to the team. Things seemed to be working out, but the job was extremely tedious with constant daily pressures to work as fast as possible, bidding for clinical trial awards from sponsors with very intricate scientific understandings of all types of clinical trial designs from cancer to dermatology. The chemo brain is a real thing, and not suited for a new job. Within 9 months I was looking for another job.

Just when I thought life had dealt me a bad hand, I was knocked down again. I freaked out, cried, got angry, cried some more, and felt the rush of embarrassment. But then I did something different! I realized all that energy could be redirected. I had a choice, and I wasn't going to allow those feelings to take over. I had confidence that I would be OK! If I had to dip into my savings, liquidate things, whatever it took, I was going to pick myself up. And what happened next?

Within a couple of months, I was working for another clinical research organization doing the same job function. This company had a much more practical approach to winning bids for clinical trials, and the team went out of their way to make sure I was comfortable. Within a few months, I was respected by colleagues for my work and enjoyed a much more pleasant work environment. This positive experience taught me that it really wasn't "me" or "my fault" for the previous situations. My only mistake had been staying with a company for too long in a very toxic group or working in a team that wasn't the right fit. WOW! This was such an amazing discovery.

I enjoyed learning about clinical trial designs and feasibility, but I knew in my heart that I wanted to be back out in the field as an MSL and closer to impacting patient care. I began interviewing for MSL positions and persevered! I interviewed several top companies, and I was in no rush. I wanted that right fit with an exceptional team. The MSL Society leadership team supported my endeavors to find the right position. I also attended the MSL Society annual conference where I met the person who introduced me to ALK, my current employer. I didn't do anything differently in my interview with ALK than I had in the previous interviews. This time it just clicked. Another moment of discovery in finding my way.

Where am I now? Almost three years with ALK, and I feel like I am at the top of my game! Based in Denmark, ALK has been the global leader in allergy for a century. My manager has built an amazing Medical Affairs team with conscious intention, strategy, and a complimentary focus on caring for her team personally. I am thriving like I never have before professionally. For example, I recently developed and managed a national medical advisory board that brought together fellowship training directors and recent graduates with the goal of gaining insights on the perception of allergy immunotherapy education in order to support academic preparation for future allergists. I am always sharing with colleagues and friends just how much I enjoy working with ALK! Our team thrived during the pandemic when so many stumbled. With all our unique contributions, Karen quickly pivoted our daily activities, allowing our team to prosper and grow.

While I spent several years feeling that I had to hide the fact that I was a recent breast cancer survivor in my professional life, another MSL shared with me her own journey as a cancer survivor and how it impacted her professional career. She was bold with unwavering energy, not hiding her challenges, but rather focusing on the way she overcame them. ALK has been so supportive of me and my professional development, a very different experience indeed. I was not bashful at all in asking ALK to sponsor my volunteer project this year! I am completely overjoyed and honored to share that ALK is joining me in my 5th-anniversary celebration of being a breast cancer survivor with corporate sponsorship for my participation as a competitive dancer for "Dancing With The Little Pink Stars" with Little Pink Houses of Hope on October 8, 2022. app.mobilecause.com/vf/DWTS/team/LilleTidwell

WOW! What a difference choosing a great company can make in your life! I hope you have enjoyed my story and learning about my "Pearls of Wisdom for Overcoming Challenges as an MSL". Here are some takeaways to pass along to my MSL colleagues:

1. Accept that life may deal you a really, really, bad hand, and you may even fall lower than you imagined.
2. Freaking out over traumatic experiences in your personal or professional life is warranted, but lingering in that space is a waste of energy.
3. Once the dust settles, you pick yourself up. No one else is going to do it for you.
4. Don't stay in a job where you are unhappy. It's not you! And it's not worth it.
5. Persevere! This is the primary determining factor that helps me in all life challenges.
6. Once you find your groove and success, enjoy every moment, celebrate, and share!

Author:

Lille Tidwell, PhD

Lille Tidwell, PhD, began her scientific career as a trained neurobiologist and anatomist from Wake Forest University with postdoctoral research in spinal cord injury at Georgetown University. After her research experience, Lille pursued a nine-year career in intellectual property in the DC-metro area. She began as a Fellow at the NIH Office of Technology Transfer, became a Patent Examiner at the USPTO, then served as a Licensing Associate at the American Type Culture Collection. Eventually, Lille became the Licensing Manager at the George Mason University Technology Transfer Office. In 2013, Lille turned her passion to influence patient care in the emerging field of orthobiologics. She joined Harvest Technologies, a cellular therapy company that focused on the use of autologous platelet-rich plasma, bone marrow aspirate, and adipose tissue. As the Manager of Cellular Science and Education, she traveled the country meeting orthopaedic and spine surgeons, presenting the scientific principles and literature that supported the use of autologous cell therapy. Lille then joined Bioventus Surgical as a Clinical Scientist in 2015. She provided medical education and scientific reviews to clinicians about bone healing and the different categories of bone graft substitutes and orthobiologics. Building upon her clinical interests, Lille joined the world of clinical research organizations as an analyst for the pre-award feasibility of clinical trials in the Research Triangle Park. Since October 2019, Lille has been a Medical Science Liaison with ALK-Abelló in the therapeutic area of allergy immunotherapy, covering the Mid-Atlantic and Southeast territories. Lille enjoys being an effective MSL by bridging her breadth of experiences in research, intellectual property, business development, and therapeutics that change clinical treatment approaches

Does Your Product Demonstrate “Efficacy” and “Effectiveness”?

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The terms “efficacy” and “effectiveness” are often used interchangeably. But when evaluating health technologies (e.g., drugs, vaccines, diagnostics, devices), their meanings have crucial differences.

Efficacy concerns the question, **“Can it work?”** That is, can a novel technology improve health outcomes under ideal conditions in an experimental design? *Randomized controlled trials (RCTs)* address this important question. RCTs typically include carefully screened patient samples with little or no comorbidities, high adherence rates, short trial durations, comparisons to placebo, and clinical experts highly trained in using the new technology. Randomizing participants to either experimental or control groups (often standard of care or placebo) mitigate bias and provides the best evidence for a cause-effect relationship between the experimental technology and health outcomes. Demonstrating efficacy is a fundamental part of health technology assessment and regulatory approval. However, **efficacy does not reflect how technologies perform in real-world settings.**

Clinical Trials by Nick Youngson CC BY-SA 3.0 Alpha Stock Images

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Only after using technology in real-world settings can we begin to assess its **effectiveness** and answer the question, **“Does it work?”**

Unlike clinical trials, real-world settings involve more complexities such as patient diversity (e.g., disease severity, comorbidities, ages, genetic profiles), variability in adherence, and the opportunity to observe long-term effects or side effects. *Observational studies* address the question of effectiveness, relying on a variety of, and often large, real-world data sources, including administrative claims data, electronic health records, registries, surveys, and data provided directly by patients or from mobile/wearable devices. Real-world data (RWD) that demonstrates the effectiveness of technology and is used in decision-making is known as *real-world evidence (RWE).*

Efficacy and effectiveness data have inherent complementary strengths and weaknesses. While efficacy data from RCTs represent the best evidence for causal relationships (e.g., drug X causes improvement in symptom Y), findings from the select sample of study patients do not necessarily generalize to the larger population of real-world

patients. In contrast, observational study designs, particularly large database studies, can generalize beyond the study sample to diverse populations and settings. Although observational studies lack strict controls and randomization, investigators can use rigorous methodological and statistical techniques (e.g., propensity score matching) to minimize bias and confounding. However, even a well-designed observational study technically measures the association between technology and its outcomes (e.g., drug X is correlated with improving symptom Y), stopping short of causal inference. *Pragmatic trials* are yet another type of research design, a middle-ground that combines the advantages of randomization and observational research.

RWE is increasingly used to inform regulatory decisions. Since the 2016 passage of the 21st Century Cures Act in the US, the FDA has been evaluating the use of RWE – generated from observational studies, pragmatic trials, and hybrid designs (e.g., using RWD-like hospitalizations for one clinical outcome as part of a clinical trial) – to monitor post-market safety and adverse events, and to support new indications for approved drugs and biologics. In 2021, based on observational data from a national transplant registry, the FDA approved the new indication for a tacrolimus product to help prevent organ rejection in lung transplants, extending the previous approval for liver, kidney, and heart transplants. During the same year, the FDA also approved a new cetuximab dosage to treat a type of colorectal cancer (mCRC) or squamous cell carcinoma of the head and neck (SCCHN) based in part on real-world data from patients' overall survival. In another recent example, the FDA accepted tumor response and safety data from electronic health records and post-marketing reports to expand the indication for palbociclib in 2019 to male patients with breast cancer, a very rare patient subgroup excluded from the original 2017 clinical trial.

While efficacy data from clinical trials may be more readily available, they are not always ideal for *health economic and outcomes research (HEOR).* The best data to inform real-world decision-making comes from real-world settings. Of course, RWD is not available for new health technologies, where regulatory and formulary decisions must rely on efficacy data alone. But when taken together, efficacy and effectiveness data provide valuable information to inform decision-making on health technologies.

So, the next time you encounter these terms concerning a health technology, you can now better assess whether the technology demonstrates *efficacy*, *effectiveness*, or *both*.

Author:

Jason T. Hurwitz, MS, PhD

Jason T. Hurwitz, MS, PhD, is Assistant Director of the Center for Health Outcomes & Pharmacoeconomic Research (HOPE Center) at the University of Arizona. Dr. Hurwitz develops and teaches numerous HOPE

Center training programs for healthcare industry professionals each year. He also conducts numerous industry, foundation, and federally funded studies in health economics and outcomes research (HEOR). His recent research includes cost-effectiveness analyses of immunosuppressants for kidney transplant recipients and of PD-L1 testing for non-small cell lung (NSCLC) cancer, and the development of a shared decision-making (SDM) tool to help patients and providers reduce the risk of drug-drug interactions. Follow Dr. Hurwitz on LinkedIn or visit https://www.pharmacy.arizona.edu/hope for upcoming HEOR training programs.

From Idea to Execution: How a Medical Affairs Field Request Launched an Impactful Resource

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Introduction: Medical Science Liaisons (MSLs) thrive on meaningful work that addresses patient care decision-making as supported by scientific data and published literature. Below, we demonstrate this impact and how a field-based inquiry evolved into a large-scale project with multiple engagement points and broad utilization.

The Need: Despite a health care professional's (HCP) vested interest in the wellbeing of their rare disease patients, any HCP can have a difficult time staying up-to-date on the latest literature and emerging science around a particular rare disease. HCPs at large, multi-center practices may have the advantage of an "in-house" thought leader (TL) in the rare condition to provide guidance and advice. However, smaller practice settings may not have this opportunity, and even in-house experts may lack the bandwidth to consult on a colleague's patient. This highlights the need for a ready and up-to-date reference on patient care decisions along the disease trajectory.

The Ask: Our MSL team recently noticed an uptick in requests from TLs for resources that could help them build a patient care algorithm within their multi-center healthcare systems to articulate and update the HCP on a particular rare disease. One such TL reflected that they wanted to ensure any patient treated at any site would receive the same caliber of care as those treated by an expert. Despite medical society guidelines, often seen as an essential cornerstone to treatment decision-making, there seemed to be a greater need for an up-to-date, comprehensive literature review to build such an educational tool that could provide considerations for such an algorithm or pathway.

A Resource Is Born: We saw this as an opportunity to provide TLs with a "one-stop-shop" of literature. Specifically, we envisioned a single packet comprised of up-to-date manuscripts, guidelines, and prescribing information relevant to clinical decision-making. With support from leadership, a team was born to bring this vision to life, including two MSLs (PhD and DNP) and the Director of Medical Information. The three of us divided the project and played to our strengths. With experience in research, the PhD found primary research literature highlighting new developments in risk stratification. The DNP, with expertise in clinical practice, found literature that supported the use of a consensus-driven care pathway and ensured we addressed most aspects of patient care. We wanted this resource to be thoughtful and intentional, so we decided to structure the document into sections such as *Medical Society Guidelines*, *New Goals for Risk Stratification*, and *Topics to Consider in an Algorithm*. Our Medical Information colleague organized all this into a Resource Document by including an executive summary and additional context to orient the audience (our TLs) to the importance of each selected reference.

Although the Resource Document was a powerful tool, our VP of US Medical Affairs saw an opportunity to take this project further. We needed to utilize our resources to develop an educational tool that provides a non-exhaustive description of potential care options in PBC based on peer-reviewed literature.

To address this, we 'distilled' the literature into simplified decision points. For example: how does an HCP decide whether a patient is at low or high risk of progression? Sometimes one single answer is unanimously supported by the literature. Other times, an HCP will need to consider many options or other variables. As it would *not* be appropriate for us to guide clinical decision-making, we presented scientifically-supported care *options* for each physician/patient touchpoint in the disease

pathway. Ultimately, the resource took the shape of an interactive slide deck: a TL could essentially click, choose, and tailor a pathway best suited for their practice and patient population.

We made sure the document is for educational purposes only and provides a non-exhaustive description of potential care options in PBC. The content is based on information from approved product prescribing information, published guidelines, and peer-reviewed literature. We made it clear that HCPs should exercise their independent clinical judgment when managing patients with PBC. In addition, we wanted to avoid bias or the promotion of one treatment option over another. Further, it would be impossible to accumulate all potential care options and create an entirely inclusive resource. Close collaboration and communication with colleagues on our legal, regulatory, and medical review committee were key. They helped us create a resource that was transparent and balanced.

Collaboration of MSLs: Our MSL team comes from various backgrounds with unique experiences. We're comprised of PhDs, DNPs, NPs, PAs, MDs, and PharmDs. It is always interesting to see how each discipline thinks, bringing different strengths and information to the team. With this Pathway tool, a PhD and DNP worked closely to bring this resource forward. The PhD is extremely focused on data and literature. She worked to make sure all the resources were relevant, balanced, and scientifically rigorous. The DNP, wanted to make sure the flow of the pathway was clinically sound: does the data directly impact clinical practice? Is each test commercially available? How can this tool be utilized in clinical practice? With this collaboration, we exhausted many resources and avenues of practice.

After our initial draft was completed, we held 3 Advisory Boards including community HCPs, Academic HCPs, and Advanced Practice Providers (APP). These Advisory Boards gave us the necessary feedback to improve the Care Pathway and bring the resource to fruition for improved patient care.

Results to Date: Once completed, a 'vanguard' group of MSLs premiered the resource to TLs in their respective territories to collect further feedback about usability in their practice. Today, our entire MSL team utilizes the resource in TL engagements, and Medical Information has received 82 unsolicited requests for the resource in four months. From our field feedback, it's apparent we built a valued educational resource with considerations for building care pathways, and for teaching fellows, new physicians, and APPs. Not only is this a point of engagement for the MSL team, but our Market Access team utilizes the resource for Systems of Care, and the Commercial Team uses an abbreviated version for talking points during their meetings.

Conclusions: As MSLs we want to make a difference in healthcare on a large scale. To be able to develop a tool that is being utilized throughout the company speaks volumes to the need and value of this project. As we, DNP and PhD, worked on this project, we learned how each other thinks and our strengths. We have also formed a bond that also improves job satisfaction. This project is an excellent example of how Field Medical can lead resource creation. MSLs have the closest finger on the pulse of TL needs and we can bring value to our TLs and create a strategic tool leveraged by many departments within our organization.

Authors:

Stephanie M. Kyle, PhD

Stephanie Kyle, PhD is a Rare Disease/Hepatology Medical Science Liaison at Intercept Pharmaceuticals. Stephanie earned her PhD in Molecular and Human Genetics from Baylor College of Medicine in 2016, followed by a Postdoctoral Fellowship at Emory University. Her research has focused on understanding epigenetic mechanisms that contribute to fatty liver disease, and neurodegenerative and neurodevelopmental disease. One of her favorite things about being an MSL is that no two days are ever the same, and no two field conversations are the same. She lives in the Tampa area and enjoys hanging out with her family and dog, gardening, boating, fishing, and interior decorating.

Tenita P. Foston, DNP, APRN, FNP-C

I am an Executive Medical Science Liaison at Intercept Pharmaceuticals currently mentoring several colleagues and serving on multiple leadership committees. I have been in the Pharmaceutical Industry since 2011 and initially worked as an HCV Treatment Educator, then a Sales Representative, then Medical Science Liaison. I have won multiple excellence awards for Integrity and Commitment to Patient Care. Prior to coming into the pharmaceutical industry, I worked as an emergency room nurse, a Family Nurse Practitioner, and a Hepatology Nurse Practitioner. I continue to practice clinically by helping with COVID screening, Urgent Care Nurse Practitioner, and Outpatient Hospice Nurse Practitioner. I enjoy swimming, cooking, and family time that includes my 3 geriatric dogs.

Benchmarking the Cultural Emotional Index in Medical Affairs

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I came to emotional intelligence because I suppose I felt I wasn't as effective as I could be. I have a lot of knowledge that kind of built up over the years in a certain area and I wanted to become more effective in it. I was finding that I ended up doing a lot of administrative tasks and not really executing what I wanted to really deliver to patients and healthcare professionals. This was a personal dilemma for quite some time.

Reflecting on this with a mentor, they suggested reading more about Emotional Intelligence (EQ). At first, I couldn't relate to how this was going to fix my dilemma, but I sought to read about it nonetheless. Researching EQ I found that the phrase has many interpretations but is generally defined as the ability to be aware of how to handle interpersonal relationships with self-awareness and empathy. It measures how well an individual is able to regulate their own emotions and the consequent emotions of others. It is scientifically split into the four domains of self-awareness, self-management, social awareness, and relationship management.

Only then has the fog cleared up in my mind and I could relate this to medical affairs practice. At a health institute: the ability to manage and read emotions would seem to be an important skill for any HCP and might potentially enhance patient-centered care, improve the quality of the HCP-patient relationship and increase patient levels of satisfaction with care. On the flip side of the coin: without bias, in no part of the pharmaceutical industry, emotional intelligence plays a more critical role in success than in the Medical Affairs Department.

Since HCPs are our main focus, it's evident that HCPs vary in their ability to achieve an understanding of the patient perspective and provide patient-centered care. This means that EQ is increasingly referred to as having a potential role in medical professions. It is suggested that EQ is important for effective practice, particularly with respect to delivering patient-centered care. To capitalize on this, EQ is increasingly referred to in healthcare literature and becoming a new "trend" in evidence generation. Yet a substantial amount of further research is required before the value of EQ as a useful concept can be substantiated.

I realized that there are many aspects that EQ will develop within you once you indulge yourself in this learning journey and I'm summarizing here some key take-home messages:

EQ will teach you to increase your self-awareness of how you feel and be more connected vs disconnected. This will help you learn to recognize your triggers and redirect negative responses to engage more positively and effectively with Thought Leaders, cross-functional colleagues, or even family and friends.

EQ will teach you how to become more understanding and acknowledging of how others feel and become more empathetic vs insensitive. This awareness of others will enable you to view situations more accurately from their perspective, anticipate responses or reactions and be more behaviorally agile and situational in your approach.

EQ will teach you how to become more resilient by managing your emotions in accordance with each situation. In this essence, self-management is about managing one's own mood and emotions while continuously improving oneself. This will inevitably enhance how you manage stress and workloads, and bounce back from the challenges the field can give you.

Last but not least, one of the aspects that were newly introduced to me was Emotional Reasoning. It is about using the information in feelings (from oneself and others) and combining it with other facts or information to create a compelling decision.

Surprisingly, your appetite for authenticity will increase. Authenticity is about openly and effectively expressing oneself, honoring commitments, and encouraging this behavior in others. EQ will teach you how to be seen as genuine as opposed to untrustworthy by more openly and effectively expressing yourself. This is a game-changer during interactions with HCPs indeed.

We are always having an influence on others in everything we do. MSLs' job is to influence correct management in the first place. What if we were all 2-3% better at having a positive influence on others? MSLs can use all these skills to build a positive influence around their everyday interactions. EQ will sharpen this skill by teaching them how through problem-solving and feedback they can empower and positively influence HCPs around them.

The importance of taking this one step further is to not only learn the theory – but to explore the things you can do to boost the quality of your day-to-day business or social interactions and identify a relationship you could improve as well as the actions you could take to do so. Closing the loop comes from finding a mentor to coach you or better still: learning by doing and exploring a coaching model for helping others respond to their challenging situations effectively. As with any 'soft skill,' the learning and successful implementation relies heavily not just on the individual's motivation, but on consistent support and follow-through.

Using the above theory and reflecting on the practical importance of EQ as well as my journey as a past MSL in the Middle-East region during 2014-2015, it is not challenging to find very intelligent individuals for an MSL role. If someone has the discipline and intellect required to obtain a master's or doctoral degree, they usually can master product information quickly, even if it is a new therapeutic area for them. The bigger challenge is finding MSLs who also have the proper levels of self-awareness so that they can read the personalities of those they are communicating with and adjust their levels of questioning or presenting appropriately.

The COVID-19 Pandemic in 2020 has also dramatically raised the need for emotional intelligence. It was evident that during the pandemic, MSLs with a high level of emotional intelligence will bring even more value to their customers. Now more than ever, being able to "read the situation" and to empathize is critical when engaging with individuals internally in the organization or externally with KOLs and other stakeholders. This is especially important when engaging with international stakeholders, MSLs need to heighten their sense of global awareness to recognize that different countries are going to be in different stages of the product cycle and may handle the situation differently from the way we have handled it locally.

Previously it was fairly straightforward to conduct a fruitful interaction. HCPs weren't that diverse, data wasn't that much, pre-defined scenarios were available or studied and time wasn't scarce. This has changed dramatically now and as an MSL you need to be efficient in using the tight time of interaction to deliver your message across and ensure it is digested.

For that reason, MSLs should, as always, do their homework before entering a conversation with a KOL. Taking it a step further using EQ, MSLs can uncover KOLs' needs and concerns easily in less time. They can use their gained talent in looking for verbal

and visual cues, like: is the KOL distracted, is someone else in the background? On a personal level, do they have children or loved ones at home, has their spouse lost their job, is anyone in their circle sick?

Let's not forget the human nature of this KOL, in the end, they are a human who has a life outside this interaction. We need to realize our stakeholders might be spending most of their days on virtual calls, telemedicine, etc., and, like the rest of us, are likely experiencing some degree of zoom fatigue as the majority of our interactions shift from face-to-face to virtual platforms. A few simple strategies can help ensure that you and your stakeholders connect in a productive way.

Productivity doesn't come in one-size-fits-all, yet EQ will ensure you're more free-handed with some practical points you can consider. **Get creative**: use your network and explore the possibility that you might be able to get the information you seek from another person on your KOL's team such as a nurse or a medical fellow. **Tap into empathy**: For those KOLs who struggle with virtual platforms, explore what the reasons are. If it is a training need, look for ways to facilitate that. If it is due to an unwillingness to change, start by acknowledging that their feelings are reasonable, and work up from there, perhaps connecting them with their peers who have adopted the technology.

Most of the time an MSL spends is on the roads tackling obstacles to ultimately reach a quality 30-minute interaction with an HCP in a clinic, yet some time is still spent back at the office in cross-functional meetings or finalizing admin work. EQ will come in handy here as well since MSLs are always looking to build strong relationships – internally and externally – hence I personally believe MSL onboarding should include technical training with emotional intelligence at its core.

For HCPs too, since EQ is conceptualized as an ability that can be taught, learned, or changed, it may be used to address the specific aspects of the clinician-patient relationship that are not working well. For this reason, teaching EQ should be a priority in the field of medical education in order to better facilitate this relationship in the future.

To summarize, since MSLs now discuss diverse topics including patient-centric solutions, adopting a growth mindset, and facilitating challenging conversations, EQ is the key to effective MSL performance. EQ will help MSLs tap into and nurture their inner talent of how well they demonstrate emotionally intelligent behavior including building trust and rapport, identifying or understanding another person's situation, feelings, or motives, and, in doing so, improve how they connect, communicate with impact and collaborate with others.

For me personally, EQ enabled me to become more aligned with myself. I began to realize I was abundant with energy that just needed correct channeling. It changed how I interacted with my Thought Leaders and I find them to be much more responsive now.

Bottom line: Medical Science Liaisons need more than just scientific acumen to get the message across. Emotional intelligence is not just a 'nice to have, but a core capability for the future, hence we need to invest heavily in continuous professional development in Medical Affairs to give MSLs the confidence to engage credibly and have the most impactful medical interactions.

Author:

Shereef Ibrahim, MBA

Currently a Therapy Area Medical Manager at Amgen, I previously spent 10 years at Novartis in different roles of varying responsibilities since 2009.

I worked as an MSL for Bone & Pain, Respiratory & Transplantation during the period of 2014 till 2016 which added a lot to my

perspective of being patient-centric in business.

My career to date has provided me with invaluable knowledge in some key areas, namely Bone & Pain, Respiratory, Cardio-Metabolic, Nephrology, Transplantation & Biosimilars in Egypt, Iran & Sudan.

I am also an accomplished individual with a strong desire to succeed and lead others to success. Indeed through my past experiences, I have had the distinction of being an individual who is energetic, hardworking, and efficient.

On a more personal level, I am open to any situation that is challenging and which tests my abilities, as well as among my work colleagues I have a reputation as being a fast learner, who is dependable and organized.

Winning MSL of the Year Award

July 2022

The importance of Recognition

Acknowledgment and recognition are vital in the workplace. Rewarding and recognizing employees leads to greater employee engagement, which increases retention and helps create a more positive overall work environment. Incorporating a rewards and recognition program helps increase employee engagement, leading to many benefits for the company or organization, like increased productivity and greater retention.

Purpose of the Award

Have you ever won an award? It’s not the prestige that matters but how it makes us feel. Awards make us feel good. They are an acknowledgment of a job well done and justification for the self-doubt and the hard work that went into winning them. Awards can make us feel proud, happy, overwhelmed, and excited. They give us career validation and confidence boost.

What is the purpose of the MSL of the Year Awards? The purpose of the awards is **to recognize excellence within the MSL profession**. The MSL of the Year Awards is one of the many ways that the MSL Society fulfills its mission of advancing the global MSL profession.

What is the Judging Process

Last year, the MSL Society received 94 nominations for MSL of the Year from 8 countries in 3 categories both in the US and outside the US. The 3 categories were MSL Rookie of the Year, MSL of the Year, and MSL manager of the year. Of those nominated, there were 32 finalists, 13 of whom were MSLs. There were 8 judges blinded throughout the voting process and they logged in a total of 171 hours reviewing every applicant. There were a total of 7 winners chosen in the US and outside the US.

Who is MSL of the Year US

As the MSL at Exact Sciences, I was the winner of the MSL Society of the MSL of the Year Award 2021 in the U.S. I have only been an MSL for less than three years and was the only MSL on my team of 12 to be nominated by my manager for truly exemplifying the core values of Medical Affairs. Having been described as a team player, I go above and beyond and produce quality work. I take on a proactive and innovative approach to mapping my territory that aligns with corporate strategies. As an MSL, I operate with the highest integrity and am accountable to my peers, leaders, and customers. Having been with the company for one year, I secured lasting relationships with many influential thought leaders and KOLs, especially those in Diversity, Equity, and Inclusion.

At the MSL Society 9th Annual Conference in Las Vegas, I used the professional platform to pay it forward and teach others how to excel as an MSL. I gave a talk about “Starting Off on the Right Foot: Best Practices for Aspiring MSLs” alongside my colleague, Dr. Nabhan Islam. Together, we discussed how to build a network through professional organizations, recognize and explore opportunities to stand out from the crowd, and craft a CV and cover letter to get noticed.

Those who know me in my circle know that I truly care about everyone around me. For example, I have been giving back to my

community as a longtime volunteer to promote health and wellness and disease prevention. I developed a strong partnership as an alumna of the University of Pittsburgh School of Public Health, Center for Health Equity, where I teach health sciences, students, how to take blood pressure and health screenings. Because of my MSL work in the colorectal cancer screening space, I train students and hold free health screenings at local barbershops, salons, churches, community centers, and health fairs.

Perhaps one of my most important contributions last year was the “Shots at the Shop” initiative. It was a community effort providing free COVID-19 vaccines put forth by the University of Pittsburgh School of Public Health, University of Pittsburgh Medical Center, Bat’s Barbershop, Black Equity Coalition, and Pittsburgh Black Nurses. I took part in a weekend-long event and volunteered to conduct health screening surveys and was a translator for Spanish-speaking patients.

Why Winning an Award Can Boost Your Career and Community

Awards demonstrate that we take pride in what we do and that we do it well. Recognizing the good and great in the MSL community every year sets a standard for everybody to see and agree on. And perhaps to inspire others to meet or exceed that standard next year! Awards are a real contributor to continuous improvement and the advancement of society. Receiving an award brings more benefits than just winning. Aside from making us feel good, it can also offer a great boost to your career.

Earning a prestigious award like the MSL of the Year Award brings credibility and opens doors to new opportunities. In January 2022, I received the “Exact Sciences Medical Affairs 2021 Award of Excellence.” One month later, I was promoted to a leadership role after a rigorous panel interview process. Currently, I am the MSL Regional Leader for the northeast where I manage three new MSLs. This was an important step in my career trajectory.

Within the MSL Society, I was invited to take part in the first-ever MSL Onboarding Training program held in Ft. Lauderdale, FL in April this year. I discussed gathering actionable insights and tips for MSL success and best practices. Furthermore, receiving the prestigious award expanded my professional network. I was offered interviews by the American Cancer Society, Doctor’s Crossing Podcast, and Ascension Health Network to give presentations, talk about my career path, and community volunteer work in underserved areas. As an MSL leader in cancer prevention, I support and participate in cancer walks to raise money for the Colorectal Cancer Alliance and the American Cancer Society. I engaged with the community and was invited as a guest speaker for the American Cancer Society Cancer Action Network.

How to Turn Awards into Action

Once you’ve won an award, what’s next? How can you turn those feelings of excitement and pride into action that furthers your community, career, and life? Here is a nice outline of the next action steps to take!

Steps to Take After Winning a Professional Award

- **Post the good news on social media.**
  LinkedIn is perfect for posting your recognition, where professional accolades can create new connections and job opportunities. If you have a certificate, post a photo of it or you holding it! Be sure to tag the awards program and use any relevant hashtags to help garner more post views.
- **Network with other winners and finalists.**
  Get engaged with this new community. Create connections with any judges, finalists, and awards program managers.
- **Engage with the community.**
  Seek ways to share your knowledge and insight from your industry, using your recent recognition to provide relevance to your insights and opinions.
- **Give back to your industry.**
  Think about ways you can give back. Perhaps this means providing opportunities for new people in your industry or interns or finding ways to volunteer your time to help further the industry and your community.

By celebrating excellence and all that is good in humanity we are valuing human achievement and encouraging more of it. Let’s never forget that and always remember to acknowledge effort and MSL excellence. Let’s never forget the teachers, trainers, mentors, judges, colleagues, friends, and family who helped us excel on our MSL career journey. And as Samuel Dyer always says, remember to “pay it forward.”

Best of luck to all the MSL nominees this year!

Sources: MSL Society and Award Force.

Author:

Maria Abunto, MD, MPH

Dr. Abunto is a medical doctor with over 20 years of clinical research experience. She received her Doctor of Medicine at the University of the East and served as a Family Medicine Medical Director. Dr. Abunto completed her Master of Public Health as Magna Cum Laude from the University of Pittsburgh Graduate School of Public Health. She assumed a position as an Epidemiologist at the National Institutes of Health, National Institute on Aging at the Laboratory of Epidemiology and Population Science, conducting colorectal cancer research in collaboration with the National Cancer Institute. Currently, Dr. Abunto is the Regional Medical Science Liaison Leader for the Northeast at Exact Sciences.

Maria is an advocate for cancer screening and prevention as a member of the Pennsylvania Cancer Coalition, Ohio Partners for Cancer Control, and American Cancer Society Cancer Action Network. She holds leadership positions as a committee leader for Women's Rights for the American Public Health Association, health advocate for the American Heart Association, advisor for Bridging the Gaps Pittsburgh, and mentor for the MSL Society and the University of Pittsburgh Alumni Association. Dr. Abunto is passionate about serving her community and educating on health promotion and disease prevention.

Dr. Abunto is recognized for excellence in the MSL profession as the recipient of the prestigious Exact Sciences Medical Affairs 2021 Award of Excellence, the Medical Science Liaison Society 2021 MSL of the Year USA, and 2020 MSL Rookie of the Year USA Finalist. She is an author of the MSL Journal of the MSL Society and is a national speaker for the American Cancer Society, Physicians Helping Physicians, Women in Bio Pittsburgh, Doctor's Crossing Podcast, and the MSL Talk Podcast.

Advancement of the MSL profession due to COVID

July 2022

The COVID pandemic accelerated the evolution of the MSL profession in ways that will propel, expand, and enhance the contributions a Medical Affairs function makes across the pharmaceutical industry moving forward. This bold claim is supported by my turbulent, yet humbling journey over the past three years which saw my career moving from the comforts of an MSL at a big pharmaceutical company to the opposite end of the spectrum serving as an MSL at small, higher-risk start-up biotech during the height of the pandemic. I hope this story inspires fellow MSL colleagues across the industry to embrace this ongoing evolution in the hopes of raising the performance standard and value contributions of one of the greatest professions in the world!

The Medical Affairs function, specifically, the MSL position has been deeply entrenched as a primary medical support role across the majority of the industry. I feel compelled to make the argument that this myopic and antediluvian perspective is no longer representative of the modern-day MSL. Today's MSL brings a tremendous degree of scientific, medical, and business acumen that adapts to the changing needs cross-functionally in all pharmaceutical corporations. This adaptation is what will inevitably enhance the core purpose of what we do, to enhance patient care and help advance the scientific needle.

My transition away from big pharma was predicated on the desire to learn and become better at the MSL craft. Personally speaking, there is no better setting to do this than to situate yourself in a small biotech company where the levels of risk, time, and resources are all too high, fast, and scarce. Going outside the comfort zone was one thing, however, experiencing this new MSL environment under the unexpected pretense of COVID cultivated a survival approach that invariably led me to push the boundaries of innovation, and collaboration, and to generate significant value for our company, which then translated to improved patient care. Consequently, this opened my eyes and inspired me to see that an MSL could make valuable contributions in excess of any standard MSL job description I ever came across.

Everyone recalls the arduous period when physician offices and hospitals were shutting down due to COVID concerns. This did not bode well for me as an MSL who was representing a new FDA-approved drug. To make matters worse, the drug I represented was also affixed to a necessary procedure to aid in delivery, preferably in an operating room. With so many physicians closing their doors to industry and the lack of live scientific conferences, the MSL role almost appeared to go backward. This is where the evolution and growth as a modern-day MSL began for me.

Rather than take the circumstances for face value, I utilized innovative strategies to engage top experts in safe and efficient ways. These included unconventional methodologies such as arranging virtual meals, outdoor picnics, and waiting outside parking garages or designated open break areas for the opportunity to engage physicians for a few precious minutes. I found my thought leaders grateful to connect with an MSL amidst the rampant social distancing restrictions being imposed across the country. The interactions appeared to allow my experts a brief momentary escape from the everyday stress and provided several benefits including valuable scientific exchange, knowledge gain, camaraderie, and a chance to move forward together.

These innovative expert engagement strategies also provided a valuable business opportunity for my cross-functional stakeholders to make introductions that would otherwise not be afforded to them due to pandemic restrictions. Despite a recent FDA approval, the opportunities for expert engagements were extremely difficult to come by. The ability to compliantly navigate this challenging climate as an MSL afforded my Commercial colleagues the rare opportunity to meet their customers. Additional downstream networks were forged among critical internal stakeholders in Marketing, Business Development, Clinical Development, and even some of our C-suite Executive Leaders.

The modern MSL needs to innovate and collaborate with sharp business acumen. The follow-up deliverables that resulted from an MSL proactively liaising introductions with KOLs created a plethora of meaningful patient care initiatives ranging from robust education programs, critical partnerships with patient advocacy groups, and far-reaching scientific data generation and dissemination to healthcare providers.

Although we are not guided by promotion and revenue generation, there is a distinct line MSLs can walk in a compliant fashion that addresses the needs of both Medical and Commercial without compromising ethics and motivations. It is imperative that the modern MSL recognize this opportunity and approach their daily responsibilities related to business implications with aplomb. Furthermore, the modern MSL has access to countless resources and the ability to deliver value to almost every corporate function, thus making it one of the most unique and versatile positions in the pharmaceutical industry.

In retrospect, I look back at the past few years with disdain at the loss of innocent life, family tragedies, and the economic

hardship COVID produced. However, through this pain and suffering, we must move forward and continue to grow and learn. Our patients demand this commitment from us and I am proud to say that amidst the difficult circumstances our industry has gone through, I can humbly say that being an MSL has provided a beacon of hope and purpose to honor those we lost.

The MSL profession has grown exponentially during the past few years and I am confident it will remain on this trajectory as we become more innovative, collaborative, and business-minded for the sake of improving patient care through new medical treatments, forging synergistic alliances, and improving access to care to more patients around the world.

Author:

Michael Shim, PharmD

Michael Shim serves as the Medical Affairs Manager for the division of Deployment Solutions at Syneos Health. He is an accomplished and innovative leader with experience in oncology and rare disease and is passionate about strategic planning to support product launches and developing operational enhancements to optimize Medical Affairs excellence.