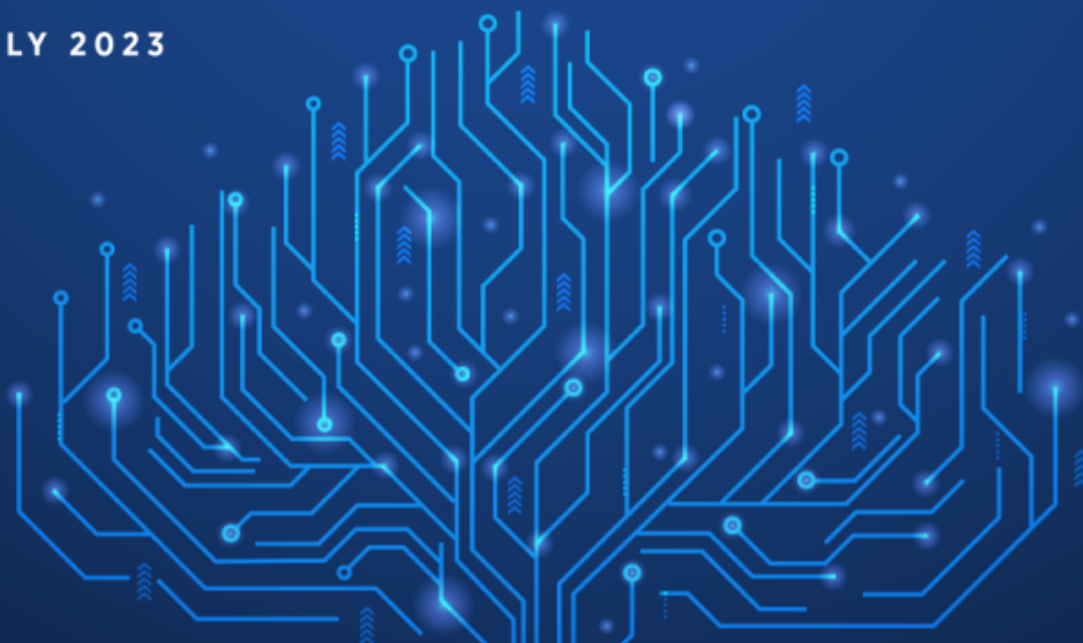


THE MSL

JOURNAL OF THE MEDICAL SCIENCE LIAISON SOCIETY

JULY 2023



NEW Medical Affairs Foundation Training Program: Opinions and Feedback From Numerous Medical Affairs Leaders

How MSL and Commercial Teams Can Build More Meaningful Experiences for Healthcare Professionals

The Role of the Medical Science Liaison and Their Knowledge Among Key Opinion Leaders in Venezuela. January-May 2023.

The Science and Art of Medicine: How MSLs Bridge the Gap to Improve Patient Access and Care

Global Survey Reveals How MSLs Are Maximizing KOL Engagement During Medical Conferences

Using Emotional Intelligence for Effective Corporate Communication and Field Visits

Optimizing Expert Identification and Engagement to Improve Rare Disease Outcomes

The MSL Role is the Critical Success Factor in KOL Omnichannel Engagement

A Field Medical Science Liaison's (MSL) Perspective of Tech-Enablement Using the Metaverse

Quality-Adjusted Life Years: Measuring the Value of Health Technologies

From Insights to Outcomes: Leveraging Technology to Measure Medical Impact

When "K" and "D" Overlap in Engaging with Opinion Leaders

What Do You Want? The Value of Coaching in Career Development

Leveraging Web 3.0 Metaverse Capabilities for Medical Affairs Training

The Value of Qualitative Research Skills in the MSL Role

Reflections From My First Year as an MSL

Coaching Never Sleeps

I am a Nurse/NP: Why I Chose Industry

Do You Have a Fun Calendar?

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Summer 2023

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Letter from the Editor

By Cherie Hyder, PharmD, MSL-BC | Summer 2023



Welcome to another quarterly edition of The MSL Journal! This one is packed with a variety of stimulating and informative content! Medical Affairs is in the midst of evolution that is taking this role toward greater strategic focus, more specialization and enhanced use of digital technologies. Change is necessary for growth, and it is in these times that we stretch and find new skills, capabilities, and passion for how we serve clinicians, researchers and most importantly, patients.

Our leadership team recently hosted a summit where we focused on the theme of “growing and driving value through innovative solutions”. When I reflect on this theme, certain words stand out. Growing is the change we must take on to explore new ideas, approaches and ways of serving those internally and externally and it is how we learn from these experiences that fosters creativity and innovation. This edition includes articles focusing on change in career paths to serve patients in different ways. We examine how we meet needs of research patients and raise the patient voice; we look at healthcare in other countries and cultures. If you have not delved into change leadership, this is an essential area to help you lean into change with a positive mindset.

Whether one is in early or later career stages within field medical affairs, growth is a common denominator. We must all keep growing and expand creative approaches with novel solutions. Coaching and mentorship come in many forms from formal channels to informal areas such as observation, immersion and extending your network to include others who can help you grow! Ensure you are in an environment that fosters creative thinking and embraces new ideas, encouraging trying new approaches.

Another facet of the summit theme relates to driving value; this is essential in all we do. If our efforts are not aligned to medical strategy and focused on yielding results that are impactful, it is time to shift in another direction. Take stock of what you are doing, why you do it and whom your efforts best serve. This edition includes articles that consider how MSLs make a difference, how patients receive value from HEOR perspectives and what we are doing to impact rare disease. Driving value is much more than metrics and KPIs; it is vital to balance the numerical value with qualitative metrics that fully describe impact in action which is the essence of value.

Finally, the summit theme focuses on innovative solutions. We must employ our best ideas and leverage the strengths of all our team members to find the creative kernels that blossom into innovative strategies and truly extend our ability to drive value. Important to this theme is the word solutions. We are naturally curious, and we aim to solve real world problems. As we venture

into the next generation of field medical affairs, we will make more use of technology, omnichannel engagement and enhanced efficiency in our fast-paced environment. Our current edition lays out multiple articles that share best practices, tips and solutions for consideration. Top of mind in the fast lane is wellness. We must all take care of ourselves in order to have the energy to take on new challenges, keep growing, driving value with impact and forging innovation with novel solutions. How does your current leadership model and support a culture of wellness?

So the theme “growing and driving value through innovative solutions” resonates in our global field medical affairs world where we are leaning into change, knowing it is necessary to guide us into the horizon where the next generation of medical affairs will be well equipped and qualified to continue rising to meet new challenges for our ultimate customer – the patient – who waits for better care and solutions that will give them the hope and promise of a better life. To this end, we keep pushing daily! I hope you enjoy all the articles in the summer edition and they give you pause to consider how you are growing, bringing value and innovating!

Cheers to summer fun and time to grab a chair in the sun to read!

Cherie Hyder



Cherie Hyder, PharmD

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 the 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 Affairs Foundation Training Program: Opinions and Feedback From Numerous Medical Affairs Leaders

By Samuel Dyer, MD, PhD | Summer 2023



In the dynamic and complex landscape of healthcare delivery, Medical Affairs professionals play a vital role in bridging the gap between scientific innovation, regulatory compliance, KOL engagement, and patient care. As Medical Affairs continues to evolve, it becomes increasingly important for professionals to have a strong foundation of training that includes the necessary knowledge and skills to continually add value.

However, the onboarding and training process for new hires in Medical Affairs, including Medical Science Liaisons (MSLs), can pose significant challenges in terms of stress, time commitment, and financial investment. Unfortunately, numerous companies struggle with limited internal resources and insufficient time to provide comprehensive onboarding for MSLs. Interestingly, a global study conducted by the MSL Society revealed that 72% of MSLs worldwide reported receiving only a set of journal articles related to the product or disease state they support as their initial onboarding training. This finding emphasizes the need for companies to prioritize robust onboarding programs to ensure the success and effectiveness of their MSL and Medical Affairs teams.

Recognizing the existing gap, the MSL Society diligently worked with numerous influential MSL leaders from their Advisory Board and other global Medical Affairs leaders for several years to address the challenge. Collectively, they developed a comprehensive training program known as the [Medical Affairs Foundation Training Program](#), aimed at fulfilling the foundational training needs of newly hired MSLs and others working in various functions within Medical Affairs.

Delivered through a self-paced eLearning format, the Medical Affairs Foundation Training Program offers over 40 hours of virtual training. This extensive program is covered across 16 courses that cover all the essential knowledge required for establishing a robust foundation in Medical Affairs.

The Medical Affairs foundation training provides fundamental skills for professionals to develop a comprehensive understanding of the core knowledge and functions within Medical Affairs. This foundation enables Medical Affairs professionals to critically evaluate scientific data, communicate complex medical information effectively with KOLs and other HCPs, and navigate the regulatory landscape with confidence and accuracy. By equipping professionals with a strong foundation, the training program provides the groundwork for continued growth and development throughout their careers in Medical Affairs.

To ensure the quality and effectiveness of the training program, we asked several MSL/Medical Affairs leaders to review and provide feedback on the content of various courses. The following is their feedback.

Why is foundational training important for medical affairs professionals?

Medical affairs professionals these days come from a variety of backgrounds- including pharmacy, clinical practice, academic bench research, consulting, and even scientific vendor services. Due to the variety of backgrounds, it is important for new, and even aspiring MSLs, to enroll in a medical affairs foundational training program so that they are prepared for the work to come. As leaders, we also want to ensure that we have provided all the necessary foundational training to set our MSLs up for success.

Douglas Yau, PhD, MBA

*Senior Director, Oncology Medical Affairs
Sanofi*

This foundational training program offers multiple elements from each module that, regardless of experience, will add to your knowledge base. It is incredibly and extensively thorough and provides a comprehensive aspect for each topic.

Rita Zambelas, MSN, MSL-BC

*Senior Consultant
Acer Therapeutics, Inc.*

It enhances their competencies, adds to their skills and gives them additional confidence for their role.

Jihad (JR) Rizkallah, MD, MSL-BC

Retired Experienced MSL Leader

Was any of the information in the training program new to you?

I was able to review and audit two of the training modules prior to the launch of this program. Being a bench scientist by training, I really wish that these programs were available when I started my MSL career 10+ years ago. As I didn't come from a clinical or drug development background, the two modules that I reviewed: "US Hospital systems" and "Drug Development" would have been perfect to lay down my foundation to understand how drugs developed from pipeline to launch and the differences in the HCPs that I engaged with at the different hospital systems in the US. The majority of the information that was taught in the e-module I had to learn on my own when I became an MSL, and these modules had just the right amount of content.

Douglas Yau, PhD, MBA

*Senior Director, Oncology Medical Affairs
Sanofi*

As stated previously I learned additional components from each module that I reviewed.

Rita Zambelas, MSN, MSL-BC
*Senior Consultant
Acer Therapeutics, Inc.*

I was familiar with the majority of the content, but I found that it is never too late to get a refresher and any new updates that may be relevant to my role.

Jihad (JR) Rizkallah, MD, MSL-BC
Retired Experienced MSL Leader

What are the primary benefits for individuals who enroll in the program?

For MSLs who enroll in this program, they will benefit from a wide range of content that would serve as an outstanding foundation as they begin their MSL career. Almost all topics that one can think to ask in medical affairs is in one place presented in an easy to learn format.

Douglas Yau, PhD, MBA
*Senior Director, Oncology Medical Affairs
Sanofi*

The primary benefit from this program is to provide the participant to know what he/she knows and is strong in but also what they don't know and need to learn more about. Particularly because it's hard to know what you don't know until you are exposed to it. These training modules approach each topic in segments to enable such self discovery.

Rita Zambelas, MSN, MSL-BC
*Senior Consultant
Acer Therapeutics, Inc.*

Improve competencies in the role, gain additional skills, be better prepared for new opportunities and get advantage over the competition.

Jihad (JR) Rizkallah, MD, MSL-BC
Retired Experienced MSL Leader

How will this program benefit companies if they enroll their medical affairs staff in this program?

For companies that do not have a robust learning management system or extensive onboarding program, team leaders should review the medical affairs foundational program and consider it as a substitute or complement to what they are offering their new hires. Even mid-career MSLs may not have been trained to the depth of what is offered in this program and may benefit from taking select modules individually.

Douglas Yau, PhD, MBA
*Senior Director, Oncology Medical Affairs
Sanofi*

This program offers companies an assurance that their Medical Affairs employees will be very informed on multiple levels (compliance, regulatory, as well as industry standards).

Rita Zambelas, MSN, MSL-BC
*Senior Consultant
Acer Therapeutics, Inc.*

I feel it will improve confidence in self, in the role, and in the knowledge. Their staff will be better equipped with what they need to be successful and to bring additional value to their stakeholders.

Jihad (JR) Rizkallah, MD, MSL-BC

Lastly, do you have any advice for MSL professionals looking to excel in their career?

My advice to MSL professionals looking to excel in their careers is to never stop learning. Ask Sr MSLs, regional directors, and VP's that you admire, and what they did to prepare themselves for success in their current role. Ask them about projects they did, roles they took, and training that they did as part of their development plan that helped them succeed. And most of all, be proactive with your own development. Your drive, enthusiasm, and grit is what will get you to whatever goal you want to reach within medical affairs.

Douglas Yau, PhD, MBA

*Senior Director, Oncology Medical Affairs
Sanofi*

I believe the knowledge and references provided by this program will provide a sound foundation for MSLs to successfully advance in their careers.

Rita Zambelas, MSN, MSL-BC

*Senior Consultant
Acer Therapeutics, Inc.*

Become a member in society and network with other MSLs, share your expertise and participate in the mentorship program, be visible, be productive, and be a leader. Your next dream career job can be there waiting for you.

Jihad (JR) Rizkallah, MD, MSL-BC

Retired Experienced MSL Leader

About the author:



Samuel Dyer, MD, PhD

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

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

While leading the MSL Society, he has conducted MSL training programs for over 75 pharmaceutical, biotechnology, and medical device companies in more than 15 countries. Dr. Dyer has also written extensively on the Medical Science Liaison profession, including numerous published articles, benchmark studies, and reports. He has been the keynote speaker and moderated numerous international conferences on various MSL-related topics, including creating teams, management, MSL training, proper

utilization of MSLs, global trends, and the KPIs and metrics used to measure MSL performance. Dr. Dyer has also served as a resource and consultant on several MSL-related projects for several organizations, including McKinsey & Company and Bain & Company.

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

Dr. Dyer is the author of the multi-award-winning and Amazon #1 Best Seller, *The Medical Science Liaison Career Guide: How to Break into Your First Role* (<https://amzn.to/4aoYcZp>). The book is the first and only step-by-step guide on how to break into the MSL profession and it has received multiple prestigious awards, including:

- 2024 Winner of the American Legacy Book Awards in the Business: Careers category.
- 2024 "Gold Award" Winner – Literary Titan Book Awards in the Career category.
- 2023 "Best Book" Winner – Pinnacle Book Achievement Award in the Career Development category.

He is also the author of the *Medical Science Liaison Job Application Tracking & Interview Self-Evaluation Journal* (<https://amzn.to/49n6MGR>).

Global Survey Reveals How MSLs Are Maximizing KOL Engagement During Medical Conferences

By Samuel Dyer, MD, PhD | Summer 2023



Attending medical conferences is an important activity for Medical Science Liaisons (MSLs). The value of MSL and Key Opinion

Leader (KOL) engagement during medical conferences is crucial to the success of a product and plays a critical role in advancing medical knowledge, fostering collaborations, driving innovation, and improving patient care.

To better understand how MSLs are maximizing KOL engagement during medical conferences, including specific activities, the technology used for planning, the number of 1x1 KOL meetings scheduled, medical booth engagements, and post-conference reporting (among other details), the MSL Society conducted a global survey from February 10th to March 3rd, 2023. The survey received 521 responses from 48 countries.

SURVEY DEMOGRAPHICS

The vast majority of both global and U.S. respondents (80%) work for Pharmaceutical/Biotechnology companies while the remaining respondents work for a variety of company types including Medical Device, Diagnostic, Contract Research Organizations (CROs), Contract MSL Organizations, and Others company types (Figures 1 and 2).



Figure 1. Global Executive Management/VP of Medical Affairs, Manager/Director of MSLs (or equivalent title), MSL, Sr. MSL, Medical Advisor (or equivalent title)

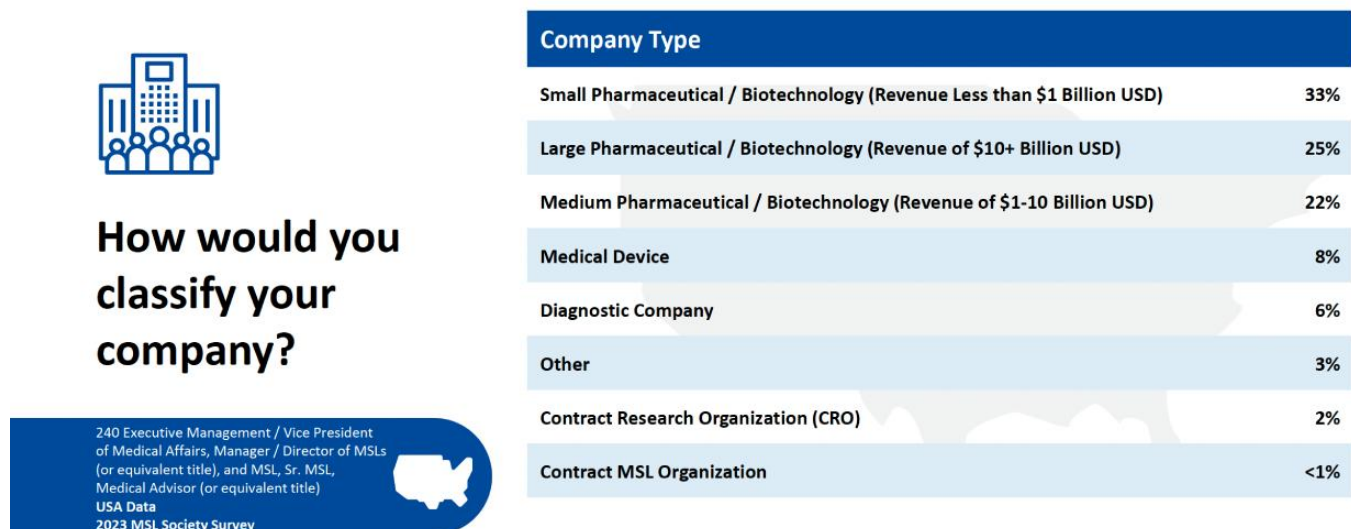


Figure 2. U.S. Executive Management/VP of Medical Affairs, Manager/Director of MSLs (or equivalent title), MSL, Sr. MSL, Medical Advisor (or equivalent title)

YEARS OF EXPERIENCE

The survey included a good representation of broad years of experience both Globally and from the U.S. Interestingly, the majority of the respondents (Global and U.S.) had less than 3 years of experience.



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

355 Executive Management / Vice President of Medical Affairs, Manager / Director of MSLs (or equivalent title), and MSL, Sr. MSL, Medical Advisor (or equivalent title)
Global Data
2023 MSL Society Survey



Years of Experience

Less than 1 year	17%
1-2 years	25%
3-4 years	19%
5-6 years	11%
7-8 years	7%
9-10 Years	6%
11-15 Years	6%
More than 15 Years	9%

Figure 3. Global Executive Management/VP of Medical Affairs, Manager/Director of MSLs (or equivalent title), and MSL, Sr. MSL, Medical Advisor (or equivalent title)



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

240 Executive Management / Vice President of Medical Affairs, Manager / Director of MSLs (or equivalent title), and MSL, Sr. MSL, Medical Advisor (or equivalent title)
USA Data
2023 MSL Society Survey



Years of Experience

Less than 1 year	16%
1-2 years	27%
3-4 years	20%
5-6 years	8%
7-8 years	6%
9-10 Years	6%
11-15 Years	4%
More than 15 Years	12%

Figure 4. U.S. Executive Management/VP of Medical Affairs, Manager/Director of MSLs (or equivalent title), and MSL, Sr. MSL, Medical Advisor (or equivalent title)

TECHNOLOGY USED FOR CONFERENCE ATTENDANCE AND PLANNING

The predominant technology primarily utilized by MSL teams for conference attendance and planning, both in the U.S. (50%) and Globally (43%) is Excel and/or Word. A large percentage of teams also primarily utilize a conference app for conference attendance and planning (Figures 5 and 6).



What technology does your MSL team PRIMARILY utilize for conference attendance and planning?

345 Executive Management / Vice President of Medical Affairs, Manager / Director of MSLs (or equivalent title), and MSL, Sr. MSL, Medical Advisor (or equivalent title)
Global Data
2023 MSL Society Survey



Technology Platform

Excel and/or Word	43%
Conference App	27%
CRM	20%
Other	10%

Figure 5. Global Executive Management/VP of Medical Affairs, Manager/Director of MSLs (or equivalent title), and MSL, Sr. MSL, Medical Advisor (or equivalent title)



What technology does your MSL team PRIMARILY utilize for conference attendance and planning?

237 Executive Management / Vice President of Medical Affairs, Manager / Director of MSLs (or equivalent title), and MSL, Sr. MSL, Medical Advisor (or equivalent title)
USA Data
2023 MSL Society Survey



Technology Platform

Excel and/or Word	50%
Conference App	29%
CRM	12%
Other	9%

Figure 6. U.S. Executive Management/VP of Medical Affairs, Manager/Director of MSLs (or equivalent title), and MSL, Sr. MSL, Medical Advisor (or equivalent title)

NUMBER OF 1 X 1 KOL MEETINGS SCHEDULED/CONFIRMED DURING A MEDICAL CONFERENCE

Both in the U.S. and globally, the majority of MSLs (62%) typically schedule/confirm between two-five 1 x 1 Key Opinion Leader (KOL) meetings during a medical conference (Figures 7 and 8).



When planning for an upcoming medical conference, how many 1 x 1 KOLs meetings do you typically schedule/confirm to take place during the conference?

256 MSL, Sr. MSL, Medical Advisor (or equivalent title)
Global Data
2023 MSL Society Survey



Number of KOL Meetings

0	6%
1	7%
2	16%
3	17%
4	10%
5	19%
6	7%
7	2%
8	4%
9	1%
10	2%
10+	9%

Figure 7. Global MSL, Sr. MSL, Medical Advisor (or equivalent title)



When planning for an upcoming medical conference, how many 1 x 1 KOLs meetings do you typically schedule/confirm to take place during the conference?

177 MSL, Sr. MSL, Medical Advisor (or equivalent title)
USA Data
2023 MSL Society Survey



Number of KOL Meetings

0	6%
1	7%
2	15%
3	16%
4	10%
5	21%
6	5%
7	2%
8	5%
9	1%
10	2%
10+	11%

Figure 8. U.S. MSL, Sr. MSL, Medical Advisor (or equivalent title)

AVERAGE NUMBER OF 1 X 1 FACE-TO-FACE KOL ENGAGEMENTS IN A MEDICAL BOOTH DURING A MEDICAL CONFERENCE

In terms of MSLs working in a Medical Booth during a Medical Conference, 20% of Global MSLs, on average, report having 3 1x1 face-to-face KOL engagements per day. On the other hand, U.S. data indicates that 20% of MSLs typically have 5 1x1 face-to-face KOL engagements per day. (Figures 9 and 10).



Typically, on average, how many 1 x 1 face-to-face KOL engagements do you have per day while working in a medical booth during a medical conference?

247 MSL, Sr. MSL, Medical Advisor (or equivalent title)
Global Data
2023 MSL Society Survey



Number of KOL Engagements

0	6%
1	6%
2	13%
3	20%
4	9%
5	19%
6	7%
7	3%
8	2%
9	0%
10	3%
10+	12%

Figure 9. Global MSL, Sr. MSL, Medical Advisor (or equivalent title)



Typically, on average, how many 1 x 1 face-to-face KOL engagements do you have per day while working in a medical booth during a medical conference?

170 MSL, Sr. MSL, Medical Advisor (or equivalent title)
USA Data
2023 MSL Society Survey



Number of KOL Engagements

0	6%
1	6%
2	15%
3	16%
4	10%
5	20%
6	5%
7	2%
8	2%
9	0%
10	3%
10+	14%

Figure 10. U.S. MSL, Sr. MSL, Medical Advisor (or equivalent title)

NUMBER OF KOL ENGAGEMENTS ON AVERAGE PER DAY WORKING IN A MEDICAL BOOTH DURING A MEDICAL CONFERENCE

47% of Global MSLs and 52% of U.S. MSLs believe the number of KOL engagements per day while working in a medical booth remained the same, compared to pre-pandemic in-person conferences (Figures 11 and 12).



On average, the number of KOL engagements I have per day while working in a medical booth during a medical conference has _____. (In comparison to in-person conferences prior to the pandemic)

Increased	23%
About the same	47%
Decreased	30%

213 MSL, Sr. MSL, Medical Advisor (or equivalent title)
Global Data
2023 MSL Society Survey



Figure 11. Global MSL, Sr. MSL, Medical Advisor (or equivalent title)



On average, the number of KOL engagements I have per day while working in a medical booth during a medical conference has _____. (In comparison to in-person conferences prior to the pandemic)

Increased	20%
About the same	52%
Decreased	28%

144 MSL, Sr. MSL, Medical Advisor (or equivalent title)
USA Data
2023 MSL Society Survey



Figure 12. U.S. MSL, Sr. MSL, Medical Advisor (or equivalent title)

NUMBER OF 1×1 FACE-TO-FACE KOL ENGAGEMENTS PER DAY OUTSIDE OF A MEDICAL BOOTH DURING A MEDICAL CONFERENCE

Outside of a Medical Booth during a Medical Conference, the majority of both Global (81%) and U.S. (83%) MSLs state that they have 1-5 1×1 face-to-face KOL engagements per day (Figures 13 and 14).



Typically, on average, how many 1 x 1 face-to-face KOL engagements do you have per day OUTSIDE of a medical booth during a medical conference?

260 MSL, Sr. MSL, Medical Advisor (or equivalent title)
Global Data
2023 MSL Society Survey



Number of KOL Engagements	
0	5%
1	15%
2	19%
3	20%
4	10%
5	17%
6	3%
7	2%
8	3%
9	<1%
10	2%
10+	3%

Figure 13. Global MSL, Sr. MSL, Medical Advisor (or equivalent title)



Typically, on average, how many 1 x 1 face-to-face KOL engagements do you have per day OUTSIDE of a medical booth during a medical conference?

180 MSL, Sr. MSL, Medical Advisor (or equivalent title)
USA Data
2023 MSL Society Survey



Number of KOL Engagements	
0	3%
1	14%
2	22%
3	21%
4	8%
5	18%
6	3%
7	2%
8	4%
9	1%
10	3%
10+	3%

Figure 14. U.S. MSL, Sr. MSL, Medical Advisor (or equivalent title).

CLARITY OF DIRECTION FROM MANAGEMENT WITH REGARDS TO SPECIFIC INFORMATION IN POST CONFERENCE REPORT

Majority of Global MSL Leaders (83%) and Global MSLs (71%) report that management and/or other internal stakeholders provide clear direction on the specific information to be gathered and synthesized by the MSL team (Figures 15 and 16). 77% of U.S. MSL Leaders and 73% of MSLs agree with this statement (Figures 17 and 18).



Typically, management and/or other relevant internal stakeholders, provide clear direction of what specific information should be gathered and synthesized by the MSL team.

True

83%

False

17%

70 Executive Management / Vice
President of Medical Affairs and Manager
/ Director of MSLs (or equivalent title)
Global Data
2023 MSL Society Survey



Figure 15. Global Executive Management/VP of Medical Affairs and Manager/Director of MSLs (or equivalent title)



Typically, management and/or other relevant internal stakeholders, provide clear direction of what specific information should be gathered and synthesized by the MSL team.

True

71%

False

29%

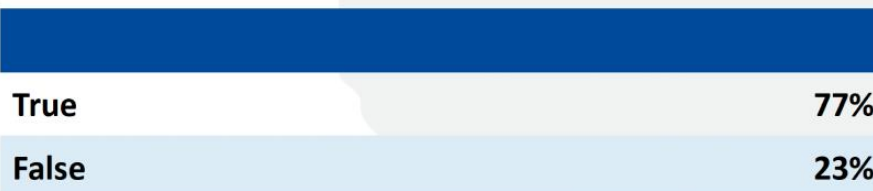
263 MSL, Sr. MSL, Medical Advisor (or
equivalent title)
Global Data
2023 MSL Society Survey



Figure 16. Global MSL, Sr. MSL, Medical Advisor (or equivalent title)



Typically, management and/or other relevant internal stakeholders, provide clear direction of what specific information should be gathered and synthesized by the MSL team.



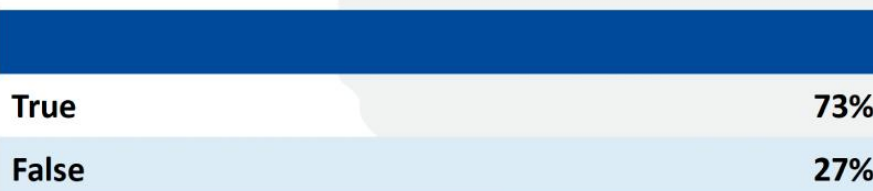
48 Executive Management / Vice President of Medical Affairs and Manager / Director of MSLs (or equivalent title)
USA Data
2023 MSL Society Survey



Figure 17. U.S. Executive Management/VP of Medical Affairs and Manager/Director of MSLs (or equivalent title)



Typically, management and/or other relevant internal stakeholders, provide clear direction of what specific information should be gathered and synthesized by the MSL team.



182 MSL, Sr. MSL, Medical Advisor (or equivalent title)
USA Data
2023 MSL Society Survey



Figure 18. U.S. MSL, Sr. MSL, Medical Advisor (or equivalent title)

CONTRIBUTION/PRODUCTION OF POST CONFERENCE REPORT BY MSL TEAM IN ATTENDANCE

Both in the U.S. and globally, the majority of MSLs (96%) agree that the MSL team attending a medical conference is expected to contribute to or produce a post-conference report (Figures 19 and 20).



Typically, the MSL team in attendance at a medical conference are expected to contribute to and/or produce a post conference report.



335 Executive Management / Vice President of Medical Affairs, Manager / Director of MSLs (or equivalent title), and MSL, Sr. MSL, Medical Advisor (or equivalent title)
Global Data
2023 MSL Society Survey



Figure 19. Global Executive Management/VP of Medical Affairs, Manager/Director of MSLs (or equivalent title), and MSL, Sr. MSL, Medical Advisor (or equivalent title)



Typically, the MSL team in attendance at a medical conference are expected to contribute to and/or produce a post conference report.



231 Executive Management / Vice President of Medical Affairs, Manager / Director of MSLs (or equivalent title), and MSL, Sr. MSL, Medical Advisor (or equivalent title)
USA Data
2023 MSL Society Survey



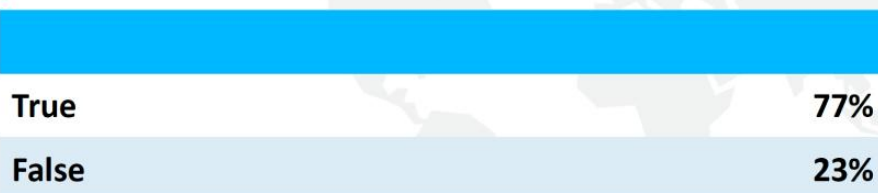
Figure 20. U.S. Executive Management, VP of Medical Affairs, Manager/Director of MSLs (or equivalent title), and MSL, Sr. MSL, Medical Advisor (or equivalent title)

CLARITY OF DIRECTION FROM MANAGEMENT WITH REGARDS TO POST CONFERENCE REPORT EXPECTATIONS

Data shows that the majority of Global MSL Leaders (77%) and Global MSLs (66%) answered 'True' to the statement that clear direction is provided by management or other internal stakeholders regarding the content of a post-conference report. U.S. data also shows that the majority of MSL Leaders (78%) and MSLs (65%) agreed with this statement (Figures 21-24).



Typically, there is clear direction provided by management (other internal stakeholders) regarding what is expected to be included in a post conference report.



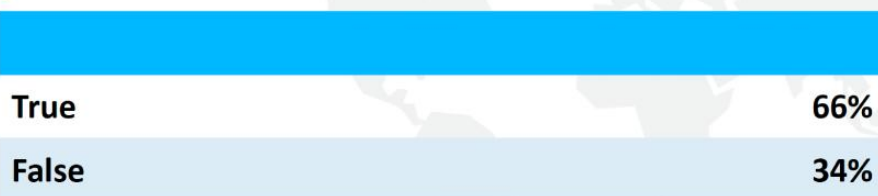
71 Executive Management / Vice President of Medical Affairs and Manager / Director of MSLs (or equivalent title)
Global Data
2023 MSL Society Survey



Figure 21. Global Executive Management/VP of Medical Affairs and Manager/Director of MSLs (or equivalent title)



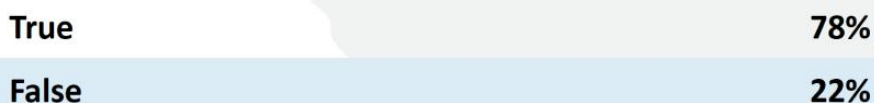
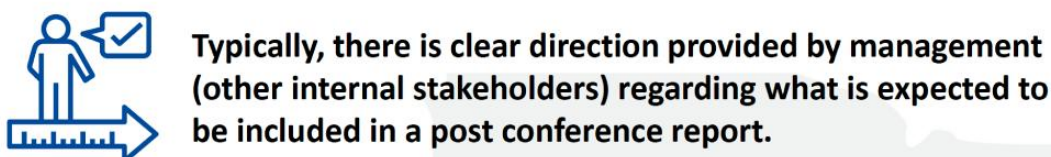
Typically, there is clear direction provided by management (other internal stakeholders) regarding what is expected to be included in a post conference report.



260 MSL, Sr. MSL, Medical Advisor (or equivalent title)
Global Data
2023 MSL Society Survey



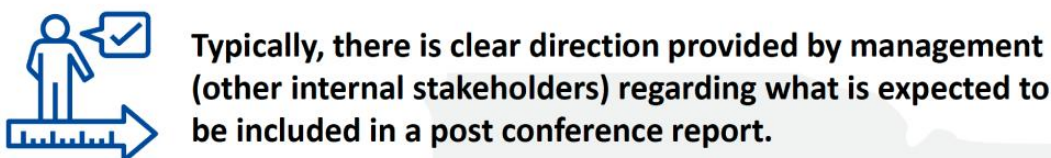
Figure 22. Global MSL, Sr. MSL, Medical Advisor (or equivalent title)



50 Executive Management / Vice President
of Medical Affairs and Manager / Director
of MSLs (or equivalent title)
USA Data
2023 MSL Society Survey



Figure 23. U.S. Executive Management/VP of Medical Affairs and Manager/Director of MSLs (or equivalent title)



179 MSL, Sr. MSL, Medical Advisor (or
equivalent title)
USA Data
2023 MSL Society Survey



Figure 24. U.S. MSL, Sr. MSL, Medical Advisor (or equivalent title)

POST MEDICAL CONFERENCE REPORT UTILIZATION BY MEDICAL AFFAIRS/MSL LEADERSHIP

Majority of both Global MSL Leaders (90%) and Global MSLs (77%) as well as U.S. MSL Leaders (92%) and U.S. MSLs (76%) state that Medical Affairs/MSL leadership effectively utilize post-medical conference reports produced or contributed by the attending MSL team (Figures 26-28).



Medical Affairs/MSL leadership effectively utilize the post medical conference reports produced/contributed by the MSL Team in attendance.



71 Executive Management / Vice President of Medical Affairs and Manager / Director of MSLs (or equivalent title)
Global Data
2023 MSL Society Survey



Figure 25. Global Executive Management/VP of Medical Affairs and Manager/Director of MSLs (or equivalent title)



Medical Affairs/MSL leadership effectively utilize the post medical conference reports produced/contributed by the MSL Team in attendance.



261 MSL, Sr. MSL, Medical Advisor (or equivalent title)
Global Data
2023 MSL Society Survey



Figure 26. Global MSL, Sr. MSL, Medical Advisor (or equivalent title)



Medical Affairs/MSL leadership effectively utilize the post medical conference reports produced/contributed by the MSL Team in attendance.



50 Executive Management / Vice President of Medical Affairs and Manager / Director of MSLs (or equivalent title)
USA Data
2023 MSL Society Survey



Figure 27. U.S. Executive Management/VP of Medical Affairs and Manager/Director of MSLs (or equivalent title)



Medical Affairs/MSL leadership effectively utilize the post medical conference reports produced/contributed by the MSL Team in attendance.



181 MSL, Sr. MSL, Medical Advisor (or equivalent title)
USA Data
2023 MSL Society Survey



Figure 28. U.S. MSL, Sr. MSL, Medical Advisor (or equivalent title)

Conclusion

The MSL Society conducted an online survey from February 10th to March 3rd, 2023, with 521 responses from 48 countries. The survey aimed to provide a comprehensive understanding of KOL engagement and MSL attendance at Medical Conferences. Key areas of focus included the frequency of KOL engagements, considerations related to post-conference reports, and gathering essential data across various sectors such as biotechnology, medical devices, and healthcare companies that employ MSLs and MSL Leaders.

Reference:

1. 2023 MSL Activities: KOL Engagement During Medical Conferences. 2023 MSL Society

About the author:



Samuel Dyer, MD, PhD

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

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

While leading the MSL Society, he has conducted MSL training programs for over 75 pharmaceutical, biotechnology, and medical device companies in more than 15 countries. Dr. Dyer has also written extensively on the Medical Science Liaison profession, including numerous published articles, benchmark studies, and reports. He has been the keynote speaker and moderated numerous international conferences on various MSL-related topics, including creating teams, management, MSL training, proper utilization of MSLs, global trends, and the KPIs and metrics used to measure MSL performance. Dr. Dyer has also served as a resource and consultant on several MSL-related projects for several organizations, including McKinsey & Company and Bain & Company.

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

Dr. Dyer is the author of the multi-award-winning and Amazon #1 Best Seller, *The Medical Science Liaison Career Guide: How to Break into Your First Role* (<https://amzn.to/4aoYcZp>). The book is the first and only step-by-step guide on how to break into the MSL profession and it has received multiple prestigious awards, including:

- 2024 Winner of the American Legacy Book Awards in the Business: Careers category.
- 2024 "Gold Award" Winner – Literary Titan Book Awards in the Career category.
- 2023 "Best Book" Winner – Pinnacle Book Achievement Award in the Career Development category.

He is also the author of the *Medical Science Liaison Job Application Tracking & Interview Self-Evaluation Journal* (<https://amzn.to/49n6MGR>).

Leveraging Web 3.0 Metaverse Capabilities for Medical Affairs Training

By Drew Beck | Summer 2023

Syneos Health® worked to integrate certain aspects of the metaverse to create a new and immersive experience for the end-user, resulting in enhanced medical science liaison (MSL) training in an engaging environment.

In the Spring 2023 issue of the Journal of the MSL Society we presented positive results of our initial pilot program that integrated a few aspects of the metaverse such as gamification and the use of a digital avatar into traditional MSL learning solutions. As a follow-up to these prior findings, we present a larger-scale, immersive metaverse pilot involving 14 medical science liaisons (MSLs) from a large pharmaceutical company.

This MSL team completed a portion of their clinical training in a social metaverse platform that was repurposed for training use. We hope to show that scaled use of existing metaverse technology can enhance MSL training outcomes without the need for complex changes to traditional didactic content and methods. This metaverse platform was selected based on select features and capabilities listed below that aligned with our company and team's learning needs and objectives. Each of these will be discussed in more detail throughout the article:

1. The unique configuration of the digital avatar and server set-up helped address security and privacy concerns.
2. Additional hardware like virtual reality (VR) headsets were not required, thus improving access.
3. User-friendly interface was conducive across generational users; no tech savviness was necessary.
4. This metaverse platform allowed for multiple, simultaneous learnings, thus increasing engagement & productivity.
5. This metaverse platform was cost-effective in that it costs less than a quarter of other competitor platforms.

HYPOTHESIS

Our journey using the metaverse began with scaling its functionality for internal MSL training initiatives. We believe this approach can dramatically enhance the preparation of our MSL teams in the short term, while providing the opportunity to gain experience using an innovative technology that might one day enable MSLs to conduct external customer engagements (e.g., key opinion leaders (KOLs)) in the metaverse. Our long-term hypothesis is that using the metaverse will improve MSL training in the following areas, which will result in improved quality and even the impact of MSL interactions with health care providers (HCPs) upon field deployment:

1. Improving the delivery of complex internal medical training.
2. Enhancing learners' satisfaction among MSL teams.
3. Providing an increasingly collaborative and engaging space for MSLs.
4. Achieving a pass rate equal to or higher than traditional industry certification pass rates.
5. Shortening the time from hire date to full field deployment without any compromise in MSL knowledge and skills.

METHODOLOGY

In our previous pilot, the first 5 MSLs on this 14-person MSL team passed their field certification assessments within a compressed training timeline of 6 weeks. We present a follow-up to this case series of the remaining 9 MSLs who were exposed to an immersive peer-to-peer metaverse training session that involved the help of both the initial 5 MSLs who were field deployed and two regional MSL managers. The training session was 1 hour and 15 minutes in length.

We will share our perspectives on how we successfully scaled this metaverse to meet our specific training needs and objectives. We will also provide an overview of how this training session was organized to meet the learning needs of our MSL team. Our hope is that the approach we took can be replicated with similar results for other MSL teams across the medical affairs industry. We encourage our peers to lean into innovative technology solutions for training that demonstrate key differentiating criteria.

Security & Privacy

This pilot involved the use of a browser-based social metaverse platform. Using this metaverse helped resolve important security and privacy concerns. With respect to security, it uses a closed channel making it amenable to host company meetings. It also uses a central Amazon server to ensure important data, such as confidential business information are kept secure.

With respect to privacy, this metaverse allows users to see a live-streaming camera feed of the user, serving as a simple, but effective form of visual authentication. For some users, it may be comforting to know who the actual user is behind the avatar. This is a feature many other metaverse platforms lack.

Lastly, it is important to note that encryption is an area regulators are concerned about protecting. The handling of personal information and privacy laws and concerns vary from country to country, thus making this an important consideration for a company when evaluating which metaverse platform it chooses to use.

No additional hardware needed

In order to optimize this training experience for all users, we used a metaverse platform that does not require the use of a VR headset. This allowed our team to keep costs down in addition to reducing unnecessary complexities of using advanced

hardware for users. Also, when thinking of potential future applications where the metaverse might be used to engage external HCPs, the authors recognized potential compliance risks associated with providing a VR headset to HCPs. This could be perceived as a transfer of value, which could raise HCP spend reporting obligations and other compliance concerns. By avoiding the use of a VR headset, certain compliance issues can be mitigated or avoided, making implementation much more simple.

Although VR headsets can provide a fully immersive metaverse experience, it also comes with potential drawbacks that can make even the most innovative metaverse initiatives a hindrance to users. A few of these issues include:

1. The 3D effects from VR headsets can be disorienting and could promote motion sickness and/or headache.
2. Software compatibility issues may exist with corporate firewalls.
3. Poor battery life and consistent need to keep VR headset software updated.
4. Too many devices for MSLs to carry in the field in addition to their smartphone, laptop, and tablet.

User-friendly interface

The decision to use this metaverse was also based on its user-friendly interface. With minimal instruction, the entire MSL team was able to log in to the metaverse in under 2 minutes using a web link provided by their manager. Once inside the metaverse, the MSLs were able to roam around freely using their keyboard arrow keys and mouse (refer to Figure 2).



Figure 2. An immersive MSL metaverse experience without using VR headsets.

Just prior to entering the metaverse, the MSL team was briefed on the layout of their various workshop stations. The managers provided the MSL team a simplified map of the metaverse environment. With this map in hand, the MSL team was able to instantly navigate to their respective workshop stations upon login (refer to Figure 3).

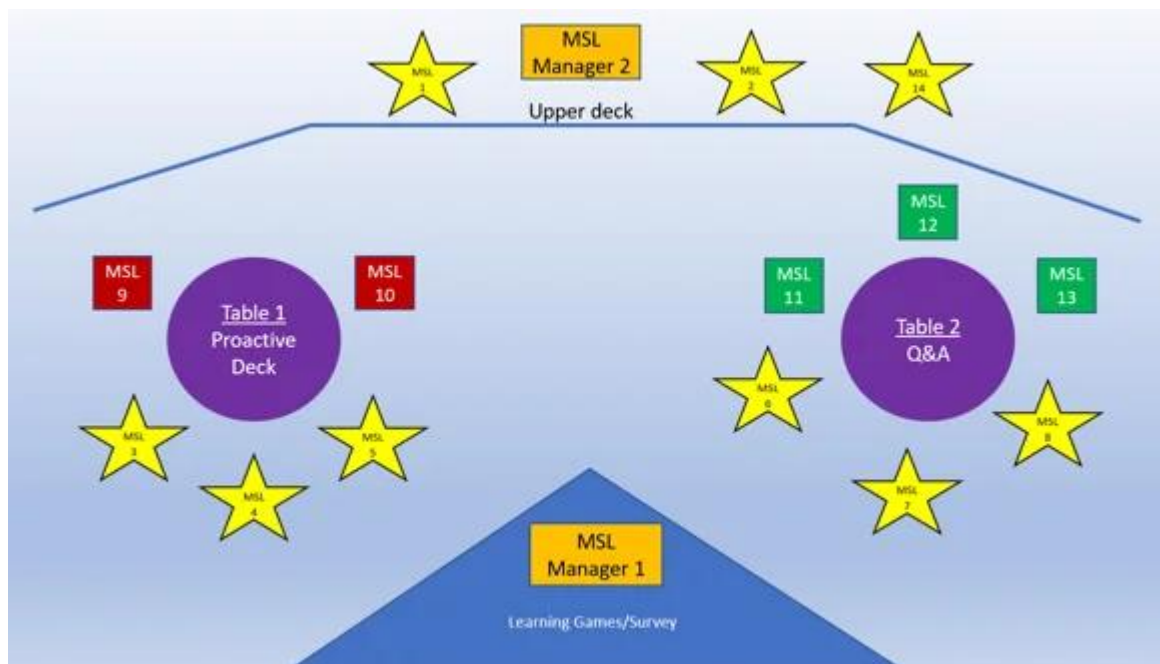


Figure 3. Map of the metaverse MSL training workshop with peer-to-peer training assignments.

Simultaneous learning that helped increase engagement & productivity

The benefit of using metaverse for MSL training is that multiple learning objectives can occur simultaneously, similar to a live workshop or virtual workshop with break-outs where individuals are able to focus on small group learning activities in parallel. Using the metaverse also created a feeling of spatial orientation and movement that naturally promoted greater interaction among the users.

In our training session, we set up two tables that served as workshop stations. These stations were moderated by five recently field-deployed MSLs who helped train their peers on either the content of an approved proactive medical slide deck resource or the Q&A portion of their upcoming field certification. Each table in this set-up utilized spatial audio technology which allowed MSLs who joined the table to have conversations among themselves and the table moderator without being disrupted with cross-traffic noise. Anyone passing by outside the specific table would not be able to hear the conversation from the group unless they joined (refer to Figure 4). This helped add a level of interactivity and engagement while simulating a live workshop environment without added distractions.

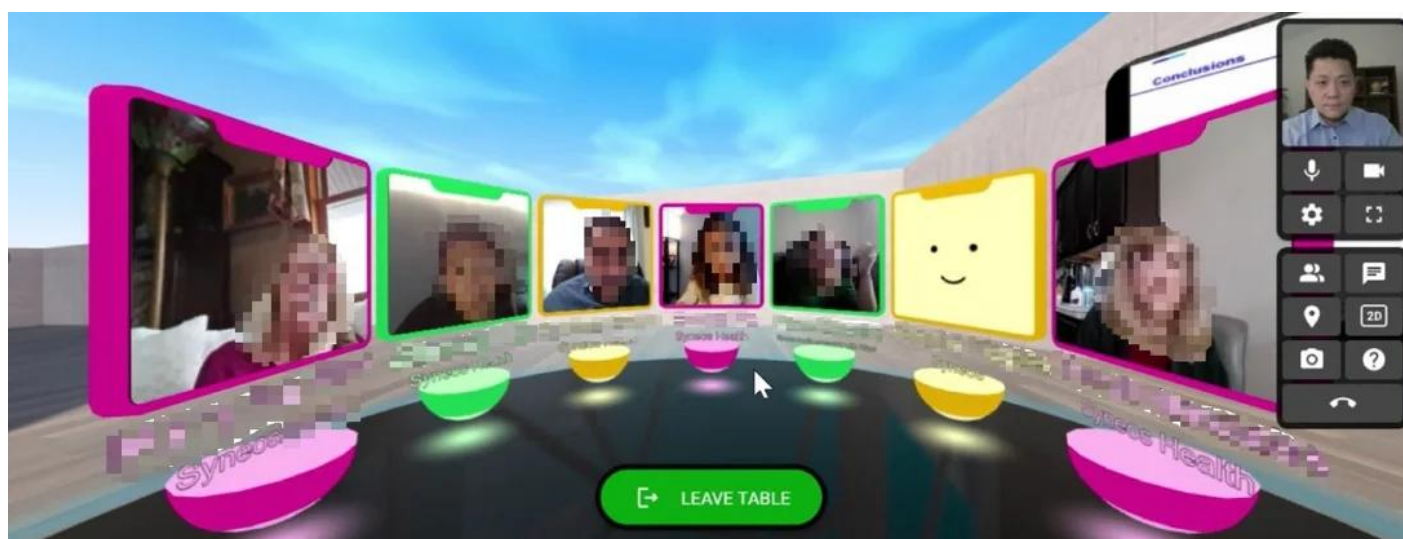


Figure 4. One of two workshop tables with didactic learnings moderated by recently certified, field deployed MSLs.

In addition to the two workshop tables, we had two MSL managers facilitating additional learning opportunities within the same

training session. One manager was assigned to the main stage where he hosted learning games and conducted surveys on a large cinema-size screen (refer to Figure 5). The second manager was assigned to the upper deck where he would host mock physician engagements with MSLs (refer to Figure 6). The mock engagement allowed a manager to observe and listen to their new MSL and provide meaningful feedback and coaching to drive enhanced performance. Both managers were able to communicate with each other throughout the session using a private chat box feature. This was especially helpful in triaging participant requests for additional information or clarity on a relevant training topic. The managers also found the feature useful in providing team members clarity on training topics that required additional information or context to drive enriched learning.



Figure 5. Manager hosting learning games and surveys on the auditorium big screen.



Figure 6. Mock physician engagements with 2 MSLs occurring on the upper deck.

Each MSL was asked to visit the workshop station of their choice. This learning autonomy was well received by the MSL team. This approach allowed every MSL to customize their individual learning journey, prior to their upcoming field certification. It also created a valuable networking opportunity for MSLs to meet their team members from other parts of the country that they would not have otherwise had the opportunity to meet due to geographical constraints.

Cost-effective and efficient

This metaverse platform was cost-effective when compared to over a dozen competitor platforms we evaluated. The cost benefit can be attributed to the lack of cutting-edge features found in other social or gaming-focused metaverse platforms, such as high-definition renderings. The lack of advanced features did not appear to be a limitation because this metaverse had all the basic features and the needed functionality that ensured an immersive, engaging, and simultaneous learning experience for our MSL team.

RESULTS

The entire training session was embraced by the majority of the MSL team. Despite the use of several multi-media applications, multiple audio-visual feeds, and autonomous navigation by the participants, this metaverse provided a beneficial learning experience where complex scientific data and topics could be shared and their application evaluated before formal certification occurred. The entire experience was generally seen as operationally seamless and noted to have optimized the time and resources spent for peer-to-peer training. At the end of the workshop, the MSLs were asked to participate in a voluntary survey to assess their experience in the metaverse. Below is a summary of the survey questions we asked. A total of 12 respondents

contributed to the survey.

How would you rank this metaverse learning session today?



In a few words what were the benefits and challenges of this learning approach?



The majority of MSLs shared a positive sentiment to their training workshop in the metaverse and found this method helpful in reinforcing their key learnings. As a companion article to this publication, one of the field MSLs who participated in this metaverse pilot, Marie Latsa, Pharm.D., shares her unique MSL experience. Her article, titled “A field medical science liaison’s (MSL) perspective of tech-enablement using the metaverse” can be found in the 2023 Summer issue of the Journal of the Medical Science Liaison Society.

Each of the remaining 9 MSLs went on to successfully pass and certify as field ready during their exams one week later. This outcome proved that this method of learning was at least as effective as conventional methodologies even under a compressed timeframe to deliver and certify MSLs for field deployment.

CONCLUSION

Scaling metaverse technology for enhanced learning and training outcomes for a field MSL team proved to be feasible using a metaverse platform we deemed user-friendly, cost-effective, and equipped with certain capabilities that made live engagement more interactive than traditional virtual meetings. This approach did not require any changes to traditional and current didactic

approaches. Also, the current training content did not need to be modified. The metaverse essentially served as an innovative medium to deliver a more effective and engaging learning experience for our new MSL team.

It is important to ensure organizational leadership and compliance partners are involved in the decision to use metaverse technology in order to identify any potential areas of concern and address them early on in the process. This partnership is essential considering how rapidly metaverse technology is changing. Partnering in this way will also help to ensure compliance with the respective company policies, procedures, and relevant laws which can vary from country to country.

As metaverse technology continues to evolve it will be important to continue building upon a scaled functional approach that allows MSL managers to get more comfortable using the technology while finding other novel ways to leverage its functionality to enhance current best practices. We continue to explore and apply our understanding of metaverse technology to one day achieve a scale that allows for compliant, cost-effective, and engaging external customer meetings. Our exploratory journey into the metaverse continues with future plans to assess the integration of artificial intelligence as well as other Web 3.0 components including, but not limited to, digital wallets, and decentralized credentials. We hope our pioneering efforts in this field will provide a future framework within the Medical Affairs industry that enhances the way we work together both internally and with external customers.

Syneos Health® (Nasdaq:SYNH) is a leading fully integrated biopharmaceutical solutions organization built to accelerate customer success. We translate unique clinical, medical affairs and commercial insights into outcomes to address modern market realities. Together we share insights, use the latest technologies and apply advanced business practices to speed our customers' delivery of important therapies to patients. We support a diverse, equitable and inclusive culture.

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Drew has spent nearly two decades serving across the Life Sciences industry – from roles in direct patient care to leading teams across marketing, sales, and broader commercialization at Lilly, GSK, and Gelesis. Recently, he has also led innovation at Syneos Health, and in his current role, Drew is charged with building and evolving new ways for educating patients, providers, and his peers across the industry.



Cherie Hyder, PharmD

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 the 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.



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Prior Employers: CVS Pharmacy, Walgreens Pharmacy, Massachusetts College of Pharmacy, Boehringer Ingelheim

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Previous TA experience: Leading MSL teams in respiratory/CV/metabolism and orphan/rare disease

Born and raised in the Boston area. Currently reside in Connecticut with my wife Shana, 2 sons Zachary and Brayden, and his mini-Goldendoodle, Cisco.

Hobbies include running, skiing, cycling, travel, and cooking...., especially at the barbeque! Big sports fan, especially the Boston Celtics and Boston Red Sox. Go, Sox!

Optimizing Expert Identification and Engagement to Improve Rare Disease Outcomes

By Nikky Oladunmoye, PharmD, MPH | Summer 2023

Orphan drug approvals by the U.S. Food & Drug Administration (FDA) have increased steadily since 2010. For four of the past five years, they have comprised more than half of all drugs approved per year. Yet, despite this, only 10 percent of the 7,000 recognized rare diseases have FDA-approved therapies. Consequently, there is relatively little research regarding some 90 percent of rare diseases, which makes it challenging – sometimes exceedingly so – to identify specialists in rare and ultra-rare diseases.

The Center for Drug Evaluation and Research (CDER) at the FDA has several programs to support rare disease drug development. For example, CDER's Accelerating Rare Disease Cures (ARC) program, launched in 2022, is looking for outcome measures. It is accompanied by the Rare Disease Cures Accelerator – Data and Analytics platform and the Standard Core Clinical Outcome Assessment Grant program. These initiatives are continuing to drive meaningful improvements in approaches to research and, ultimately, therapies and patient outcomes.

Outside the regulatory framework, there is [the National Organization for Rare Disorders](#) (NORD) and [Rare Diseases Europe](#) (EURODIS) that offer education and resources to support patients and their families that includes links to research groups and medical experts. Disease-specific patient foundations also are invaluable resources.

¹“New Drug Therapy Approvals 2022,”

<https://www.fda.gov/drugs/new-drugs-fda-cders-new-molecular-entities-and-new-therapeutic-biological-products/new-drug-therapy-approvals-2022>, accessed March 20, 2023.

²CDER Continues to Make Rare Diseases Priority with Drug Approvals and Programming to Speed Therapeutic Development.

<http://www.fda.gov/news-events/fda-voices/cder-continues-make-rare-diseases-priority-drug-approvals-and-programming-speed-therapeutic>, accessed March 20, 2023.

³ “CDER Launches New Accelerating Rare Disease Cures (ARC) Program,” May 10, 2022,

<https://www.fda.gov/drugs/drug-safety-and-availability/cder-launches-new-accelerating-rare-disease-cures-arc-program>

⁴ FDA, “Rare Disease Cures Accelerator,”

<https://www.fda.gov/drugs/regulatory-science-research-and-education/rare-disease-cures-accelerator>, April 21, 2023

⁵ U.S. FDA, “New Funding Opportunity: FDA Standard Core Clinical Outcome Assessments (COA) and Endpoints Pilot Grant Program,”

<https://www.fda.gov/drugs/news-events-human-drugs/new-funding-opportunity-fda-standard-core-clinical-outcome-assessments-coas-and-endpoints-pilot>, Accessed April 21, 2023.

⁶ National Organization for Rare Disorders (NORD), <https://rarediseases.org/>, Accessed April 21, 2023.

⁷ EURODIS, “Projects & Services.” <https://eurodis.com/products-services>, Accessed April 21, 2023.

All combined, however, these resources still only address a small fraction of the needs and involve merely a subset of all those clinicians who have rare disease knowledge.

Rare Disease Education is Inadequate

There has been a tremendous evolution, not only in medicine, but in reach, as determined by access to, and equity around, healthcare, as well as awareness regarding the role of demographics such as age, class, ethnicity and geographic location.

While those factors are each important in diagnosing and treating more prevalent diseases such as diabetes and heart disease, they become even more important when rare diseases are involved. For more prevalent diseases, for instance, we can look at subsets of populations and access claims data from large, comprehensive databases. In rare diseases, however, enough data may not be readily available, whether it is fundamentally lacking quantitatively because of the complexity of the disease or is misrepresented because of misdiagnoses or lack of diagnostic information.

For those situations, even obtaining an accurate diagnosis, developing an effective treatment plan and identifying health care providers can be fraught with difficulties. Such differences set rare diseases apart from mainstream therapeutic areas and, because they affect pharma's ability to engage with rare disease experts, exacerbate the process of identifying and engaging the right clinicians.

Product development for rare diseases is complicated by multiple factors, including the scarcity of well-defined meaningful outcome measures and reliable natural history of disease data, much of which resides in data silos. Consequently, the patient journey is convoluted and, in 2013, required an average of seven years to achieve an accurate diagnosis. More recently, a 2022 Spanish study of 3,304 individuals with rare disease found the mean time to accurately diagnose their conditions exceeded six years. Another Spanish study found that receiving an accurate diagnosis typically involved more than 10 specialists and often required the patient to travel to another region for care.

For patients and their families, the diagnostic odyssey also is beset by psychological and financial hardships. During their journey, patients invariably endure a long parade of physicians, potentially mistaken diagnoses, inappropriate treatments and medical

⁸Denton N, Molloy M, Charleston S, et al, "Data Silos are Undermining Drug Development and Failing Rare Disease Patients," *Orphanet J Rare Dis.* 2021 Apr 7;16(1):161, doi: 10.1186/s13023-021-01806-4

⁹ National Organization for Rare Disorders (NORD), "30 Years After the Orphan Drug Act: It Still Takes Too Long for People with Rare Diseases to Get an Accurate Diagnosis," <https://rarediseases.org/30-years-after-the-orphan-drug-act-it-still-takes-too-long-for-people-with-rare-diseases-to-get-an-accurate-diagnosis/> October 23, 2013, Accessed April 21, 2023.

¹⁰Benito-Lozano J, Lopez-Villalba B, Arias-Merino G, et al, "Diagnostic Delay in Rare Diseases: Data from the Spanish Rare Diseases Patient Registry," *Orphanet J Rare Dis.*, 2022 Nov 17;17(1):418, doi: 10.1186/s13023-022-02530-3

¹¹ Benito-Lozano J, Arias-Merino G, Gomez-Martinez M, et al, "Diagnostic Process in Rare Diseases: Determinants Associated with Diagnostic Delay," *Int J Environ Res Public Health.* 2022 May 26;19(11):6456, doi: 10.3390/ijerph19116456.

complications before the condition is correctly identified. In the past decade, there have been more than 300 citations discussing misdiagnosis of rare diseases in the United States.

The most significant complication is premature death. Unfortunately, approximately 30 percent of children with rare diseases die by the age of five years. Many, therefore, are never diagnosed accurately and in some cases, misdiagnosis led to treatments that exacerbated their conditions.

Multiple studies have documented the correlation between delayed diagnoses and increases in healthcare costs. For example, one study of functional neurological disorder (FND), which, although not a rare disease, is frequently misdiagnosed, showed prediagnostic costs for FND were nearly three times higher than for those diagnosed with other neurological disorders. Those diagnoses took 48 months, versus the median of 12 months for other neurological disorders.

The diagnosis of neuromyelitis optica spectrum disorder (NMOSD) offers another example. NMOSD is a rare autoimmune disease characterized by inflammatory attacks on the central nervous system that lead to permanent neurological damage. A review of five years of records involving 10,697 patients who had or probably had NMOSD were compared to an equal number of controls. The researchers found that patients with NMOSD were more likely to be diagnosed as having conditions with similar

manifestations (42% of NMOSD patients vs 31% of controls), and that they were significantly more likely to be prescribed medications known to exacerbate NMOSD.

The effects on the families of undiagnosed patients – especially children – are significant, too, and manifest as high anxiety and depression.

The difficulty of diagnosing rare diseases stems not only from the rarity of the diseases, but also from the dearth of information on the diseases and within the medical profession. A survey of 927 physicians in 16 therapeutic specialties in the U.S. and Europe found that 70 percent believed rare diseases were 10- to 100-fold rarer than

¹² “Rare Childhood Diseases,” National Stem Cell Foundation, <https://nationalstemcellfoundation.org/focus/rare-childhood-diseases/#:~:text=30%25%20of%20children%20with%20rare%20disease%20will%20not,of%20deaths%20in%20the%20first%20year%20of%20life>, Accessed April 21, 2023.

¹³ Cuoco S., Scannapieco S, Carotenuto I, et al. “Higher Health Service Costs Associated with Delayed Diagnosis of Functional Neurological Disorder,” *J Neuropsychiatry Clin Neurosci*. 2023 Winter;35(1):86-91. doi: 10.1176/appi.neuropsych.21110288. Epub 2022 Aug 22.

¹⁴ Foley D, Polson M, Williams T., “Misdiagnosis and Disease-Exacerbating Medication Use in Patients with Neuromyelitis Optica Spectrum Disorder in the United States: A Retrospective Claims Analysis,” Presented at: Nexus Meeting of the Academy of Managed Care Pharmacy. 2022

¹⁵ McConkie-Rosell A, Hooper SR, Pena LDM, et al, “Psychosocial Profiles of Parents of Children with Undiagnosed Diseases: Managing Well or Just Managing?” *J Genet Counsel*, January 2, 2018, <https://doi.org/10.1007/s10897-017-0193-5>.

they actually are. In that same survey, nearly 90 percent said they have been involved in diagnosing a rare disease, but only 20 percent said they were confident in making those diagnoses.

Collectively, these studies underscore the fact that physician education regarding rare diseases is incredibly important. There are other lessons, too, for the greater healthcare system.

When that study focused on answers from the 60 nephrologists who responded, the authors found that 70 percent of the American respondents – but only 43 percent of European respondents – cited a lack of knowledge regarding the signs and symptoms of rare diseases. Access to appropriate diagnostic tests was a challenge for 57 percent of American respondents and 37 percent of Europeans.

That particular study didn’t delve into why physicians indicated access to diagnostic tests was challenging. Other studies, however, have explored that landscape. For many rare diseases, tests have not yet been developed, although gene and exome sequencing and the use of microarray assays have enabled diagnoses for between 25 and 35 percent of otherwise undiagnosed patients. Even when appropriate tests exist, however, such as whole exome sequencing, their availability often is restricted because of conflicting or unavailable evidence regarding clinical utility and cost effectiveness. In other cases, access is constrained the availability of reference laboratories able to perform (and be reimbursed for) the tests.

Such studies suggest that improving the patient odyssey through rare disease diagnosis and treatment, therefore, requires great collaboration among governments (to establish policy), physicians, scientists, drug developers, patients and patient advocates.

Identifying Rare Disease Experts is Particularly Challenging

Identifying physicians with expertise in specific rare diseases can be difficult.

Consequently, if physicians have difficulty identifying the disease, it is understandable that Medical Affairs (MA) professionals also will have difficulty identifying the treating physicians. This is why engagement is different for pharmaceutical companies that are developing medicines for rare diseases.

¹⁶ Rohani-Montez C. “MO035: Education Needs in Diagnosing Rare Renal Disease: A Clinician Survey,” *Nephrology Dialysis Transplantation*, May 3, 2022, https://academic.oup.com/ndt/article/37/Supplement_3/gfac062.016/6578382, accessed March 20, 2023.

¹⁷ Marwaha S, Knowles JW, Ashley EA, “A Guide for the Diagnosis of Rare and Undiagnosed Disease: Beyond the Exome,” *Genome Med.*, 2022 Feb 28;14(1):23. doi: 10.1186/s13073-022-01026-w.

¹⁸ Hayeems RZ, Bernier F, Boycott KM, et al, “Positioning Whole Exome Sequencing in the Diagnostic Pathway for Rare Disease to Optimise Utility: A Protocol for an Observational Cohort Study and an Economic Evaluation,” 2022 Oct 10;12(10):e061468, doi: 10.1136/bmjopen-2022-061468

¹⁹ Vandevelde NM, Vermeersch P, Devreese KMJ, et al, “Belgian Rare Diseases Plan in Clinical Pathology: Identification of Key Biochemical Diagnostic Tests and Establishment of Reference Laboratories and Financing Conditions,” *Orphanet J Rare Dis.* 2021 Feb 17;16(1):89. doi: 10.1186/s13023-021-01728-1

Consider the hypothetical case of AA who, as a child, experienced pains in his hands and feet and intolerance to heat and cold. This impaired his ability to play sports. He was seen by a pediatrician, but did not receive a diagnosis.

During adolescence, he continued to experience fatigue and gastrointestinal distress. It wasn't until his forties, when he had a stroke and experienced significant reduction in kidney function, that he was referred to a nephrologist. That physician had treated other patients with Fabry disease and recognized those symptoms in AA, who then was diagnosed with that disease. Over the years, AA's Fabry disease had progressed significantly, impacting quality of life and causing a plethora of visits to different specialties, which is often the case with rare diseases.

This case highlights the fact that patients will present to various specialties. It is imperative, therefore, to engage with clinicians beyond the key treaters and treatment centers, recognizing the many additional touchpoints and specialties in the patient's odyssey. In doing so, Medical Affairs can develop a more robust perspective as it engages those specialties as part of its stakeholder identification, engagement and strategic planning initiatives.

New Ways To Diagnose Rare Diseases Are On The Horizon

Artificial intelligence combined with machine learning is beginning to be used to identify misdiagnosed or undiagnosed patients early in their diagnostic odyssey, but it isn't perfect.

By combing the electronic health records (EHRs), the goal is to drive as much relevant information as possible to the machine learning algorithms so that rare diseases may be detected that otherwise may not be suspected. As yet, however, precise predictive modeling is impossible because of the limited quantity of data available to train the application. That said, AI still is useful in combing through EHRs to identify any red flags that may prompt a physician to consider the possibility of a rare disease and to perform additional tests. IQVIA scientists are taking this further by integrating AI into solutions that combine analytics, technology and data, thereby helping scientists explore further, faster and more accurately.

To Help, Engage the Right Experts

What MA professionals can do while waiting for AI and machine learning to mature is to widen the field of physicians who may be treating patients and/or have relevant expertise with rare diseases, and thereby enhance engagement.

MA professionals, particularly Medical Science Liaisons, can make a huge difference in the lives of many patients with rare diseases by putting information into the hands of clinicians who have the potential to shorten the diagnostic odyssey. Therefore, it is MA's

²⁰ Wany Y, Mack C, Zhang F, Cai Y, et al. Detecting Rare Diseases: A Case Study Using Machine Learning Semi-Supervised Network to Identify Under-Diagnosed Patients. Presented at 35th Annual International Conference on Pharmacoepidemiology and Therapeutic Risk Management. International Society for Pharmacoepidemiology, 2019.

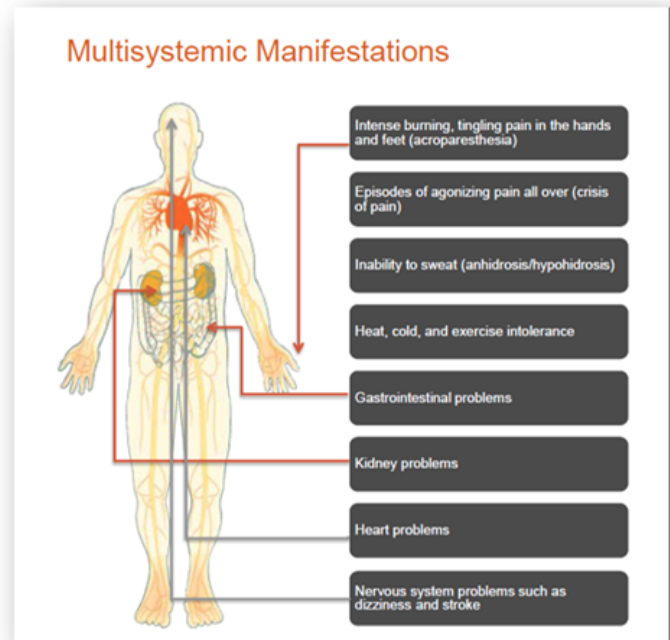
duty to find and engage these experts, informing them of emerging scientific developments, potential treatments and clinical trials. Otherwise, MA may be missing a huge opportunity to shorten the diagnostic odyssey and improve patient outcomes.

Taking both a targeted and differential approach to identify experts expands the pool beyond traditional KOLs. This

comprehensive strategy employs a peripheral approach grounded in scientific evidence, analogous diseases and differential diagnosis, as well as traditional methods to identify specialists. The result is a pool of traditional and non-traditional clinicians with whom to share information. Ultimately, combining peripheral and traditional identification methods has the potential to improve outcomes for patients with rare diseases.

The potential multisystemic presentation of symptoms to various specialists in rare diseases such as Fabry Disease can provide insights for education and engagement for Medical Affairs

- General practice
- Pediatrics
- Ophthalmology
- Cardiology
- Nephrology
- General neurology
- Specialized Neurology
- Endocrinology
- Dermatology



Angelman syndrome is a good example. This genetic disorder affects 15,000 people in the U.S., and approximately a half million people worldwide. Patients suffer developmental and neurological abnormalities that appear illogical upon examination.

The traditional approach to identifying experts in this area concentrates on neurology and focuses on centers of excellence and known specialists. To look further, we first must ensure our data lake is complete. This means looking first at scientific evidence regarding Angelman syndrome from sources such as PubMed, conference data and clinical trials.

From that point, we should look beyond Angelman's syndrome to analogous diseases – those which may appear in the differential diagnosis for Angelman or present with similar symptoms. We also should look at the various sequelae associated with the rare disease, how those sequelae might be managed and by which specialties, thus potentially broadening the scope of clinicians who also may encounter such patients.

Then we can begin to identify individuals based on the literature who have expertise in Angelman's disease. By reviewing their entire body of work, certain themes may emerge that can be used to create a specific search strategy.

What can be done today to widen the potential field of rare disease specialists and enhance engagement?

Traditional Identification

- Claims
- Referrals
- Centers of Excellence
- Patient Organizations

Incorporate Peripheral Identification

- Scientific Evidence
- Analogous Diseases
- Differential Diagnosis
- Identify non-traditional specialists
- Promote awareness

Improved outcomes
for patients with rare
diseases

With the advent of additional new treatments for Rare Diseases we in Pharma must continue to help identify potential treaters and forge a new pathway, shortening the diagnostic odyssey.

For example, the primary search term might be "Angelman's syndrome," followed by specific analogous diseases the literature search revealed. This can be accomplished by identifying clinicians with research in Angelman's and then finding additional "non-Angelman's" work they've created within the scope of their experience. For Angelman's syndrome, this might include autism spectrum, cerebral palsy, Rett syndrome, Mowat-Wilson Syndrome, and several other conditions. That approach reveals many-fold more potentially relevant abstracts, and thus, many more potential clinicians who may have the medical experience to recognize and treat Angelman's. Based upon their foundation of knowledge about analogous conditions, these clinicians may, therefore, be open to discussions about new treatments, thus broadening our scope of engagement.

Expanding the Approach to Rare Disease Expert Engagement

Step 1: Targeted approach to optimize identification and engagement

- Assure your evidence base is complete when beginning your search
 - PubMed
 - Conference posters and presentations
 - Clinical trials
- Look beyond the primary rare disease diagnosis
(i.e. other "analogous" diseases within the clinician's wheelhouse and in the differential diagnosis)
- Examine the sequelae resulting from the disease and how those conditions might be managed, and by which specialties. This assists in sorting your findings

Step 2: Develop a comprehensive search strategy based on your previous findings

- Develop:
- A Primary search strategy which focuses on the specific rare disease
 - A differential search strategy which includes potential sequelae and "analogous" diseases within the expert's "wheelhouse"
 - Distill scientific evidence (manuscripts, posters, clinical trials) for experts, disambiguate and determine affiliations
 - Filter for relevant specialties and assign weightings

Step 3: Review your findings and select potential experts

- Review findings
- Identify experts based on focus of work within the targeted indication, specialty and density (evidence counts)
- Identify additional experts with evidence in analogous conditions by specialty and density (evidence counts)

To Paraphrase “the Great One, Wayne Gretsky,” this approach helps MAs “skate to where the puck will be, rather than where it has been.”

This expands your reach and your ability to engage these clinicians based upon their needs and interests, enabling Medical Affairs professionals to identify clinicians best able to use specific information about new and emerging therapeutics and clinical trials. This approach builds awareness in a way that, hopefully, helps physicians make more accurate diagnoses earlier.

This approach enables Medical Affairs to reach out to physicians who probably treat the disease areas of interest. To paraphrase a quote from “The Great One,” Wayne Gretsky, this approach helps MAs “skate to where the puck will be, rather than where it has been.”

In that way, as clinicians in industry, we can make a huge difference in the lives of many patients with rare diseases by assuring information about new, innovative treatments is in the hands of those who may have the potential to shorten the diagnostic odyssey for those in need.

“As clinicians in industry, we can make a huge difference in the lives of many patients with rare diseases by assuring information about new, innovative treatments is in the hands of those who may have the potential to shorten the diagnostic odyssey for those in need.”

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.

Nikky Oladunmoye, PharmD, MPH



Nikky Oladunmoye is a pharmacist with a background in Public Health. She has 15 years of pharmaceutical industry experience within Medical Affairs and Regulatory Strategy. She currently works in Rare Disease at Pfizer Canada ULC as a Medical Affairs

Scientist in Rare Hematology and Rare Neurology. Her industry experience spans internal medicine, neuroscience, oncology; and she finds working in rare disease incredibly rewarding due to the significant unmet need and the opportunity for life changing therapies.

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.

Reflections From My First Year as an MSL

By Tina M Buehner, PhD | Summer 2023

Leaving academia for a position in industry was an enormous culture shock for me and now having had time to reflect on my experience, I feel confident enough in my role to discuss my view of the yearlong acclimation process. Having two decades of clinical experience in nuclear medicine and molecular imaging did not prepare me for my first MSL job. Despite extensive experience in oncology and the fact that molecular imaging is the basis for the technology that my role supports, it just wasn't enough to teach me what was required of me as an MSL and the value that I bring to thought leaders. Every role may be different from the next and perhaps with years of experience come distinct needs, but these are some of the things that I feel are essential for the a new MSL:

Introduction to the company

Having a good Human Resources person to walk you through the company basics, benefits, and the full onboarding process, including all technology requirements is critical. The MSL role has become even more reliant on modern technology since the start of the pandemic and making sure we have the technology aspect of our jobs running smoothly is essential to success. Additionally, there are company-specific minutiae for employment in biotech and pharmaceutical industries that can be challenging to navigate without the help of HR. My recommendation is to have key contacts on hand: HR, Payroll, Benefits, and the I.T. Helpdesk.

Education

A formal educational program to guide you through the science of your new role including any applicable data and publications is vital. I had many years of working in oncologic imaging under my belt, but the knowledge I gained of various malignancies was superficial at best. Even when I would scratch the surface from diagnosis to treatment, it still was not to the same extent of the fundamental comprehension required in the disease state of the oncology world that I had just entered. Being a new MSL, joining a brand new MSL team was not without challenges. I, however, was fortunate enough to have a strong MSL Team lead who had extensive experience building productive teams and another MSL colleague with a strong education background who developed a 6-week internal training program focused on disease state science and existing data. This was invaluable for me because you do not know what you do not know, which makes it hard to know where to start. Having a formal training program that built a foundation of knowledge from basic to advanced was essential for me to feel comfortable jumping into my position and to conduct KOL interactions with confidence.

Mentorship

One of the things I believe was critical was to have a partner or mentor that you can pair with to help navigate the MSL role, the expectations, and the challenges. I was paired with a member on my team which was fantastic for me because I had the opportunity to sit in on KOL meetings, watch the engagement between MSL and KOL, and observe the thought-provoking interactions that occurred from both ends of the conversation. While it is important to have someone on your team, I have also heard that MSLs are paired up with other MSLs in the same company in a separate care area. I did not have that experience, but I can certainly see the benefit in having a mentor in another area who may be in a completely different life cycle for their product. Understanding the unique needs or practices one has in other areas is highly beneficial for growth. Additionally, I recently learned of the mentorship program offered through the MSL Society, and I look forward to taking advantage of this member benefit. Members can sign up to be a mentor or a mentee and will be paired with another MSL outside of their company. Mentors need to have at least 5 years of experience and mentees less than 3 years as an MSL.

Training

Finally, I attended the 3-day MSL communication and presentation course which really gave me a solid understanding of my role and the value I bring to KOLs. As a professional who has been extremely active within my academic professional societies and has held high leadership roles that required me to speak in front of hundreds of people, I still left the MSL training with a completely unique perspective on presenting and speaking. This was one of the best investments I could have made in my career as an MSL and I would highly recommend it to all MSLs regardless of their years of experience.

I am happy to have gotten involved with the MSL Society and look forward to collaborating with them more in the future.

Author:



Tina M. Buehner, PhD

Tina M. Buehner, PhD, CNMT, FSNMMI-TS is an MSL in breast oncology supporting the investigational and scientific use of diagnostic radiopharmaceuticals in breast cancer imaging. Prior to entering medical affairs, she worked at large academic centers for over 24 years in several roles within nuclear medicine and molecular imaging in the Chicago area including Northwestern Memorial Hospital, Loyola University Medical Center, and Rush Medical Center. She is board-certified in nuclear medicine technology, computed tomography, and radiation safety. Throughout her career she has been extremely active in leadership of several organizations supporting nuclear medicine and in 2014, she received fellowship from the Society of Nuclear Medicine and Molecular Imaging (SNMMI-TS), an international medical and scientific professional organization with over 17,000 where she also served as the President from 2020-2021. She resides in Chicago and her MSL territory covers several midwestern states.

The Science and Art of Medicine: How MSLs Bridge the Gap to Improve Patient Access and Care

By Mitch D'Rozario, Ph.D | Summer 2023

MSLs play a critical role in the Pharmaceutical Industry

Medical Science Liaisons (MSLs) are a vital link between the science and art of medicine. They work with healthcare providers (HCPs) to understand the needs of patients and then bring that knowledge back to pharmaceutical companies to help develop and market new drugs that are essential to advance patient care. MSLs are critical in the product life cycle, from early development to post-launch. In fact, they are playing an ever earlier role in guiding drug development during research phases before regulatory review and approval. They are responsible for building and maintaining relationships with HCPs, providing scientific education and support, and gathering insights to bring back to the company. MSLs are trained scientists, and they also deeply understand the real-world challenges that HCPs and patients face. This unique perspective allows them to bridge the gap between science and practice – to help develop new novel therapies drugs that make a real difference in patients’ lives.

Stage	MSL Responsibilities	Watch-outs
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Early Development	MSLs work with TAEs to understand unmet medical needs, gather feedback, and build relationships. Play a strategic role in connecting TAEs to clinical development teams, when appropriate. Additionally, Clinical Trial Liaisons (CTLs) play a role in study enrollment, recruitment, and referrals to enhance clinical trial efficiency	MSLs must act in patients' best interests and provide only scientific evidence-based information. In the pre-approval stage, MSLs should focus on disease state information and avoid making product claims.
Clinical Development	MSLs provide scientific support to investigators, ensure trials are conducted according to protocol, communicate with stakeholders, share disease state info, and address data gaps to support regulatory approval and market access.	MSLs are not sales representatives and should not try to influence TAEs to prescribe a particular product.
Regulatory Approval	Educate healthcare professionals about the product and how to treat patients safely. Provide support to marketing teams and help develop marketing materials. Communicate effectively with healthcare professionals and understand their needs .	Be cognizant to ensure field medical teams only share data or information approved by the company, as regulators are sensitive to pre-approval promotion.
Launch	Gather insights, provide feedback to the product team, and promptly report Adverse Events (AE). Communicate effectively with internal and external stakeholders to understand their needs .	MSLs must adapt to a heavily regulated, evolving industry. They monitor safety events, ensure diagnosis and treatment, and report insights quickly. They gather market intelligence by attending conferences, speaking with TAEs, reviewing data. This helps the company launch products and identify barriers.
Post-Launch	Adapt to new technologies and the changing needs of healthcare professionals, patients, TAEs, and other stakeholders. Ensure post-marketing AEs are reported in a timely fashion . Improve data generation and be open to new research. This will help advance care and research.	A strong understanding of the pharmaceutical industry, disease state, and treatment landscape is essential. Information not supported by scientific evidence should not be provided. As the product matures, it is important to keep an open mind about where care trends are going. Research and data generation efforts may be a focus during this time.

Role of MSLs in Diagnostics

The role of an MSL in diagnostics has several similarities and differences from an MSLs' role in pharma. In diagnostics, the primary focus of the MSL is to support the science and development of the diagnostic tool and be the primary liaison between the TAEs and the company. The diagnostic MSL may also cross-collaborate with multiple teams, including research, clinical development, marketing, Market Access/HEOR, and commercial, to provide this scientific support and bring insights gathered from the field to the company. Of note, these collaborations will depend on each company's compliance policies. In diagnostics, the MSL may also serve as the liaison for clinical consults that develop from provider or patient questions directly related to the diagnostic test result. The diagnostic MSL's role is bridging the gap and is essential for the product life cycle by cross-collaborating to develop a new diagnostic tool to improve patient care.

Digital Therapeutics: A new frontier for Field Medical

Digital therapeutics (DTx) is a more recent category of medicine defined as evidence-based, clinically evaluated software and devices used to treat various diseases and disorders. Because many clinicians and stakeholders have never utilized or worked with DTx, there is a considerable emphasis on educating payers and critical decision-makers on DTx and the clinical value proposition of products.

Medical science liaisons (MSLs) in digital therapeutics still engage with their peers in the scientific community. Still, they must also interact with various stakeholders, including healthcare decision-makers, influencers, and other scientific community members. These stakeholders include managed care organizations, specialty pharmacy providers, pharmacy benefit managers, integrated delivery networks, and non-prescribing clinicians like psychologists and therapists.

Due to the nature of digital therapeutics as software programs and wearables, MSL's influence and responsibilities during the product life cycle do wade into uncharted territories that are new to the profession. MSLs interface with software engineers and product teams due to the nature of the products. Digital areas of concern that require more exploration include security of systems, patient privacy protection, transfer of value when systems or related materials have a significant monetary value. Additional technical considerations, such as updates to content and visuals in the program and unique outcomes reporting

requirements, play a part in digital therapeutics but not prescribed medications.

Integrated Medical Engagement Plans

While there are nuances in the roles and responsibilities of MSLs in Pharma, DTx, and Diagnostics, the activities of successful MSL teams are built on the backbone of an integrated engagement plan. The engagement plan is geared toward ensuring that eligible patients can access the therapies and diagnostics that are appropriate for them. In the peri-launch period, these plans focus on TAE identification, relationship development, assessment of clinician awareness of disease state and products, and support of clinical trials. As the product matures, engagement plans evolve to include tactics related to broader groups of stakeholders and support and dissemination of clinical trials and real-world effectiveness studies. Education of key decision makers within health networks and payers is key to ensuring access, as those external stakeholders determine the effective eligibility of patients for any therapy or diagnostic through their formulary decisions. In all stages of development, field medical teams play a key role in collecting and sharing those observations, or insights, about how and why clinicians make their therapeutic decisions — importantly, these insights may inform new tactics or strategies for improving patient access.

Global alignment and local solutions for maximal MSL effectiveness

Companies must ensure a capability structure exists to support field medical activities worldwide in today's global economy. This structure includes the processes, tools, and training that ensure MSLs can be successful in their local markets. While medical plans may be developed globally, local markets tailor engagement plans to meet their unique regulatory, payer and health system needs. Within the capabilities structure, systematic documentation of external engagement activities, contribution to the insights generation process, and blinded or unblinded surveys of TAEs may form the backbone for assessing MSL effectiveness.

By ensuring global alignment and local solutions, pharmaceutical companies can maximize the effectiveness of their MSLs and help to ensure that their products are successful in the worldwide marketplace. Another consideration of the globalization of the field medical affairs is cultural differences. Companies must be mindful of appropriate ways of engaging HCPs, considering patient needs, and using communication approaches that engender trust, respect, and integrity.

The MSL role is challenging, yet rewarding

Medical Science Liaisons (MSLs) are at the forefront of cutting-edge science and have the opportunity to make a significant difference in patients' lives. They do this by working closely with teams across different stages of product development, providing contemporary scientific and medical insights that help ensure a product's timely launch and safety in the market. Their expertise and knowledge play a significant role in supporting the product's lifecycle management process and bridging the gap between the science of medicine and the art of how medicine is used from the bench to the bedside.

The value of the field medical role is well-recognized with many companies increasingly investing in medical affairs teams. Additionally, MSLs are more often initiated at earlier stages of novel therapy development to lay a groundwork for healthcare professional engagement, ensure efficient clinical research efforts, and navigate successful launch and commercialization of novel therapies. The evolution of this vital role is expanding, with a strategic focus, to bring new therapies to the patients who are waiting.

Author:



Mitch D'Rozario, Ph.D.

Mitch is a Malignant Hematology MSL at Genentech/Roche. In his MSL career spanning hematology and ophthalmology, Mitch has supported ocular surgical devices, microdosing implants, biologics, antibody-drug conjugates, oral inhibitors, and bispecific antibodies from Phase I-IV. Mitch enjoys advocating for customers and patients, collaborating with internal colleagues, and building strategic tools to make informed business decisions and deliver urgent medical solutions. Mitch earned his Ph.D. from Drexel University and trained as a postdoc at Washington University School of Medicine. In a pre-COVID world, Mitch can be seen keeping pace with his two boys, Francis (2.5 years) and Miles (1 year). In a post-COVID world, he has been busy being a Montessori dad, learning how to bake, and going to OrangeTheory (while maintaining a safe distance) to burn off the said baked goods.



Delilah Huelsing, PhD

Delilah Huelsing is currently a Director of Field Medical Excellence at Amgen. In this role, she partners with global medical leadership on initiatives that optimize external engagement, continuously improve the insights generation process, use analytics to help share the value of Field Medical teams. Delilah draws upon 20 years of experience in various Field Medical roles in the device and pharmaceutical industries. Prior to that, Delilah was on faculty in the Department of Biomedical Engineering at the University of Alabama-Birmingham, where her teaching responsibilities and independent research were focused on cellular cardiac electrophysiology.



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Dawn O'Reilly is an Oncology Enterprise Research Medical Science Liaison with AbbVie. She lives in North Carolina with her husband, 3 children, and their spunky golden retriever. She is passionate about healthy living, playing outside with her kids, and she loves to travel.



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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 the 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.

Using Emotional Intelligence for Effective Corporate Communication and Field Visits

By Deepa Sunkari, MD | Summer 2023

Yay! You got the job! Now it is time to meet the new team and strive out a map for yourself in this organization. Keys for

effective team communication starts with Emotional Intelligence.

What are the pillars of emotional intelligence? And how about soft-skills to enhance dealing with others?

Self Awareness

Emotional awareness, the ability to recognize the emotions you're experiencing, and understand that while these can be powerful, you can also factor them out of the equation. Tips to help with regulation are deep breaths, maintaining composure, walking away or journaling.

Motivation

It is important to remember why we want to maintain emotional self-awareness. Intrinsic and extrinsic motivation have to be evaluated. Intrinsic is a person's ability to stay on-task and moving toward a goal without any external reinforcement; those people manage to stay focussed and ahead of the crowd when it comes to getting the job done. Extrinsic motivation comes in the form of your colleagues, your managers, your boss, the prospect of a raise or a bonus, as well as the powerful subsequent pressures that stem from project deadlines and meetings.

Self Regulation

Self-regulation or self-motivation of emotions is important as well. It focuses more on a person's ability to control yourself and your emotions and impulses, as well as how well you can leverage your resources and abilities in any given interaction. Deep breaths, mini meditation, and calmness is vital for self-regulation.

The five elements of self-regulation are: self-control, trustworthiness, conscientiousness, adaptability and innovation.

Empathy

Empathy is an extremely important factor to get right in both business and in your personal life. We'd argue that this is one of the most important pillars of the concept. If you can put yourself in someone else's shoes, even just for a minute, you'll be significantly better off when it comes to analyzing the transaction or the interaction when you take into account their sensibilities and their concerns. This is particularly important when we're talking about the concept of your customers and their concerns, but applies equally when we're talking about colleagues in your organization or your loved ones.

Social Skills

Important areas to cover when exercising your social skills are persuasion and influencing skills, leadership skills, conflict management skills, communication skills, change management skills, relationship-building skills as well as your ability to cooperate and collaborate with your colleagues.

Other things to keep in mind include understanding your manager's leadership style. Are they authoritarian? Laissez-faire? And adjust your responses to know how to respond accordingly. Understand where their motivation or needs lie within the organization and adapt to support them.

The same goes for how Medical Affairs can support Sales. Let them know how to utilize you in their field needs. Is there a difficult-to-access account? A top-tier KOL needs to be given the latest innovative knowledge about a newly launched product, the product's study, and competitors. A speaker that needs to be trained for a dinner engagement? Giving them an idea of how to effectively utilize medical affairs will help with communication.

These tips should help any early Medical Science Liaisons and Medical Affairs professionals to acclimate into their new role quickly and help maintain longevity.

Author:



Deepa Sunkari, MD

Deepa Sunkari, MD, BCMAS, LME is a board certified medical affairs specialist physician who has been working in Medical Affairs for approximately 7 years in various roles such as MSL, Medical Director, Director of Medical Affairs, etc. She has worked in large and small pharmaceutical companies, large businesses, medical device organizations, and clinical research organizations.

Through her experiences, she has developed leadership skills, emotional intelligence, and she likes mentoring others for improved business functioning. She has been actively involved with the MSL society since 2015 and thanks Dr Samuel Dyer for his constant support and growth of the Medical Affairs community.

Coaching Never Sleeps

By Marcus West | Summer 2023

Great people are critical to business success and they never stop looking for ways to improve while organizations must aspire to greater heights in the fast-changing pharmaceutical sector.

These twin drivers are fueling an expansion in staff coaching as an exercise in good business practice and progressive leadership that underscores a company's values.

Innovation and developments across the pharma sector are traveling at warp speed and advantages are being seized and maximized across all aspects of business.

Empowering staff with personal and professional development through coaching is now seen as a core characteristic of agile, attractive organizations and the most productive pathway to ensuring employees feel valued and have the freedom to push their skill sets and careers forward.

Embedding coaching into a business opens doors to improved performance, better client engagement and satisfaction, cross-department collaboration, staff retention, improved patient outcomes, and a progressive atmosphere where critical thinking and innovation – aligned to business imperatives – can flourish.

This White Paper examines the principles of coaching and how they can energize a business across a range of metrics.

The engagement landscape has been subject to tectonic shifts since the pandemic and it is clear that field medical teams need new skills to open dialogues and develop rewarding relationships with HCPs.

Whether this is through digital channels or in-person, the way that connection is handled is of wide-ranging significance. It resonates through the business transaction to employee satisfaction and staff retention; each with a critical influence on commercial success.

A recent survey by Gallup of executives from a range of industries demonstrated that good quality coaching had a positive impact on elements such as productivity, absenteeism, customer loyalty, and sales and contributed an overall 23% boost in profitability. ¹

The report emphasized that employee engagement and well-being was substantial factor in driving growth and productivity during times of change. “Companies constantly evolve, and they need new ideas all the time. Engaged employees are a lot closer to the best ideas. They’re thinking about the whole company and how they fit into it, and their ideas lead to better decisions,” stated Jim Harter, Gallup’s chief scientist of employee engagement and wellbeing.

The Transformative Edge

Jim Robinson is CEO of Urovant Sciences, a clinical-stage biopharmaceutical company that specializes in developing accessible treatments for people with urologic conditions. Urovant’s rapid growth to becoming an influential player in a challenging sector is built on a foundation of a ‘talented and motivated’ team that operates in a ‘culture of inclusion and empowerment’.

It is an ethos that takes commitment, investment, and strength of purpose.

Coaching is an important factor according to Robinson, a former President, of Americas Operations at Astellas Pharma. “A strong coaching culture ultimately demonstrates the commitment to driving engagement throughout the organization,” he says. “The act of coaching is a conscious act that demonstrates – and literally is the embodiment of – creating a culture of engagement because the engagement becomes a two-way dialogue. You are not only coaching in terms of skill development or coaching for the opportunity at hand, but you are observing the fruit in the outcome of that coaching. “

Robinson, who is passionate about employee development, believes that coaching needs to be agile and free from the constraints that often shackle in-house training systems. “One of the key elements of successful coaching is adaptability: Adapting to the opportunities, adapting to the issues and challenges you face, and creating approaches that adapt to the environment that you’re in – also known as developing a game plan for success. Having the ability to adapt and being able to act on the opportunities or challenges is essential.”

Pharma is awash with challenges as organizations recalibrate to meet new demands from HCPs and clients who want tailored content that is delivered with succinct and compelling narratives. Conventional scientific presentations and broad-based campaigns will fall flat so field representatives need to be skilled and confident in personal communications.

“Field medical teams get a lot of training in science but they don’t get the same level of training in external communication, especially when it comes to being brief,” says Linda Traylor, PhD, VP, Medical Excellence, Acceleration Point, who has 25 years of high-level MSL expertise.

“It is critical to become proficient in techniques such as developing elevator pitches, being succinct, telling stories with data, having resources available, and being able to practice it out loud. In the end, field medical is in the business of having practice-changing conversations. And that is a different skill that they have to develop.”

Sales excellence consultant René Enthoven, who has 35 years of experience developing sales performance through enhancing skills and capabilities, believes coaching is worthy of boardroom-level presence. “It is critical to reaching goals in a changing world,” he says. “Every company at the moment is experiencing some form of change or is in transition to new targets and building different ways of building new relationships.

“They are asking their employees to work hard to reach their goals but you need to help them to grow in their abilities and competencies to do whatever they need to do.”

Enthoven, who is also a consultant to coaching training app 60 Seconds, adds: “A lot of things have changed in the market, particularly the way people communicate and the pandemic experience has shown that we cannot just go on autopilot. We have to almost reinvent how we communicate with each other.

“Communication methods change with every generation and despite recent upheavals, one thing has not changed; people like to do business with people.”

Coaching: Challenge and Reward

Coaching and training both have a place in the corporate structure but they serve different purposes and should not be conflated into one approach. Training focuses on knowledge transfer such as learning the science and therapeutic detail of a product; coaching is personal development, with a focus on nurturing the skills and competencies to deliver that knowledge in a way that resonates and enhances relationships.

“Coaching, by definition, cannot be a workshop,” comments Traylor. “Coaching and training are separate entities. We should

never convey that if you attend a workshop you are going to have a coaching experience.”

While training involves disciplined learning; coaching needs personal examination and reflection and, if done correctly, takes time, investment, and a willingness to step out of comfort zones, according to Traylor.

She adds: “If you’re not challenging somebody, and pushing the boundaries of their level of comfort to establish what is needed for growth, then you are not making the most of the coaching opportunity.

“It can be uncomfortable but I believe that employees deep down really want to be pushed to grow and get better at communicating and negotiating even if they think they are pretty good already because, when they go through coaching processes, they often find they have blind spots

“If they have a really good coach they should feel uncomfortable. The most important thing I could say about this is that if you are not getting pushed outside your comfort zone, then the coaching experience is not working. Some people thrive in it but others take time to adjust to the environment but once over that initial barrier they can get as much value as those who understand it immediately.”

The Trust Imperative

“Establishing trust between the coach and staff member is essential if it is to be effective,” says Linda Traylor, who has developed expertise in solving complex medical affairs challenges and has expertise spanning FDA-regulated drugs, devices, biologics, and non-FDA regulated laboratory-developed tests. “That way you can get down to having the hard conversations, without judgment, that will improve the individual.

“Without trust, it is just an exercise in futility.

“There is no magic wand for establishing trust overnight; it comes with the evolution of the relationship through honest and authentic conversations. Having frameworks and systems in place is critical but really good coaches know how to balance the relationship, the human component, with the technology, techniques, and systems.”

It is a sentiment endorsed by Jim Robinson, whose company mission statement stresses that ‘values create an engaging environment and unlimited potential for positive change’.

He says: “Part of the core of engaging is making people feel comfortable, that they are included, and you are treating people equitably. I believe in DEI, particularly when you define it in a way that connects not only to all our colleagues but contributes to our business success. It means recognizing the uniqueness of individuals, treating each person fairly and with dignity and respect, and valuing each person such that they are comfortable being who they are and using their voice to contribute their best.

“This supports engagement and wraps together with coaching to deliver tangible and sustainable results.”

Trust and engagement are woven into the fabric of Robinson’s leadership approach and he adds: “I do think that coaching is an essential part of leadership. I believe the attributes of a good coach stem as much from character traits as skills or competencies, and it demands a long-term view.

“A leader as a coach is focused on the team and their future. It’s about developing the organization and developing the person for both today and the future path they’re going to provide the organization. On the one hand, we help them be successful today, but even more importantly on the other hand, make them successful long-term.

“This means making sure you are covering the fundamentals of leadership: maintaining the highest levels of integrity; knowing your business inside and out; being authentic; being willing to pitch in; caring for your employees and having a ‘never quit’ attitude. From that, coaching will be a natural outcome.”

The coaching DNA of an organization needs to flow from the C-Suite level to have a real, sustained impact and business benefit, observes Traylor. “If that doesn’t exist then your program will struggle. Buy-in has to come from the leadership team but you also have to resource it appropriately with the right people and the right technology, techniques, and processes, and integrate that with the company’s goals and individuals’ goals.

“It’s not enough for leadership just to say we want this done and have it executed; we have an expectation that it is integrated into the performance goals.”

The Rewards

The theory and sentiment are clear and, many experts believe, that business rewards flow through corporate culture to commercial success.

A study in the Journal of Management Development 2 that surveyed 87 companies employing business coaches found that 99% reported a positive return on investment. It stated: "The results confirm findings from past research such as that reported by the Institute of Coaching that managers should not undervalue potential contributions to individual and company attributes from coaching."

The point was underscored by the Centre for Creative Leadership, a non-profit provider of leadership development, which contends: "If your organization has a coaching culture, then you have a culture of truth and courage.... in corporate cultures that aren't shaped by coaching mindsets and values, what's true often goes unspoken, change only happens when a crisis takes place, and courage is a rare quality."

Coaching in action on the front line

Omnichannel opportunities to reach HCPs are abundant but their time is at a premium so pharma companies are looking for a stand-out narrative that connects and lifts the science into actionable relevancy.

"The majority of a company's growth comes from what happens in the field and that is where coaching in pharma is at its most potent," says Linda Traylor. "It should lead to improved levels of engagement where you can see a real return on investment."

"Coaching can help field teams optimize their time and their ability to connect, whether it is virtual or in-person. MSLs have a lot of training in science but not so much coaching in people engagement and that is where a lot of the benefit is derived from putting these coaching tools into action to build new skill sets."

"MSLs often have to do virtual engagements where the visual non-verbal cues are not present so you have to switch to non-visual non-verbal cues such as intonation and word emphasis. These skills have to evolve to accommodate new methods of external engagement."

"Companies that invest in coaching are going to get a competitive advantage."

An embedded, well-resourced coaching program is now expected by many employees, and René Enthoven comments: "Younger members of staff now expect that a company will invest in them to grow their abilities. People want to be coached because they can learn, grow and become better."

"If you don't do it you are both not using your assets - your staff - and you run the risk of them leaving the company."

The business benefit from coaching is emerging as a significant element of an organization's success and ability to grow. In pharma, this reaches mission-critical status as companies need to showcase often complex, innovative therapies that defy blockbuster drugs standard commentary.

Pharma companies also have to understand and meet the expectations of HCPs, adds Enthoven, who states: "A company will have high expectations of its staff but so will the client. They do not want to be bothered with simple questions or things they can look up on the internet. They expect excellent communication skills."

"Good coaching is not only expected, it is vital to future success."

Break-Out Box

Jim Robinson, Urovant's CEO, believes that leading a company is far more than being a figurehead visible at either product announcements or financial and regulatory reporting set-pieces.

For him, leadership is an all-consuming, all-pervading pursuit and he has a five-point plan to frame how leaders can establish and get the best from a dynamic, inclusive coaching culture.

He says: 'First, paint a very clear picture of what you want to achieve. And when you paint that picture, make sure it connects both the head and the heart. That will start the buy-in process because people will begin to visualize in their own minds what must happen - and what they need to do individually - to achieve that outcome.'

Second, always remember you are part of the team, not apart from the team. Everyone is in this together, collectively driving towards that outcome. There are no silos; there's one team.

Third, you need to be brutally honest about your performance. You accelerate what's working, fix what's not and fix it quickly. You cannot let problems linger; you address them right away. Problems always get in the way, and they definitely impact performance.

Fourth, praise in public, and coach in private. Make sure you are always looking to find people doing the right thing. An extension of this is that you never tolerate jerks. There's no quicker way to destroy the culture and morale of your company than if you tolerate jerks.

Finally, the best way to think about all of this is to create a virtuous cycle. Start by painting that picture to get the buy-in or alignment you need as a team to drive performance without exception, then foster engagement, and then actively build this approach into the culture of your company as a key to success.

About the Interviewees:

Jim Robinson

Jim is Chief Chief Executive Officer and Board Member of Urovant Sciences, responsible for overseeing the company's operations. His career has touched every aspect of the industry, with a relentless drive to make a meaningful impact on the lives of patients and their families suffering from some of the most devastating diseases, including urological diseases such as overactive bladder.

He was the President and Chief Operating Officer at both Paragon Biosciences and Alkermes and worked for Astellas Pharma for 12 years where he held the positions of President of Astellas US and President of Americas Operations.

Linda Traylor

Linda Traylor, PhD, VP, Medical Excellence, Acceleration Point is a seasoned clinical research and medical affairs professional with over 25 years of experience in the healthcare industry, including pharmaceuticals, medical devices, biologics, and diagnostics. She has extensive cross-functional expertise covering the entire product lifecycle and has worked across multiple therapeutic areas, including oncology, immunology, infectious disease, diabetes, cardiovascular and kidney disease, as well as precision medicine.

Throughout her career, Linda has held various medical and clinical affairs positions, from Medical Science Liaison to Department Head for Clinical Development and Medical Affairs (CDMA). Her expertise lies in solving complex medical affairs challenges and developing data-driven narratives to support scientific exchange and thought leader development. As an adept people manager, Linda has built high-performing teams supporting all medical affairs functions. She is passionate about simplifying complex issues into straightforward, data-driven solutions for the healthcare industry.

René Enthoven

René has over 30 years of sales, sales management, and executive management experience in a variety of industries. He has held the positions of sales representative, sales & marketing manager, and director-owner.

He is a respected senior trainer and business consultant – for a number of companies including 60 Seconds – focusing on sales, service, and leadership. René leads certification workshops, and client presentations and coaches employees managers, and executives, and maintains that talent development and retention is a key success factor in business.

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About the Author:



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

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

I am a Nurse/NP: Why I Chose Industry

By Tracy R. Wilson, DNP, FNP-C | Summer 2023

I get a lot of connection requests on LinkedIn or just random questions asking, "how did I get into the industry, as a nurse?" or "what made me make the transition to industry from nursing?" For me, it was a transition that made sense. My career trajectory has been a little atypical. I am a former NICU nurse. While pursuing my MSN in nursing education, I was approached to consider a teaching role at the local community college in my hometown. I obtained this role and fell in love with the art of teaching. I worked on my post-Master FNP certificate during this time and prepared to become an FNP. I also got married and moved to Virginia.

My husband is the one who introduced me to the concept of working in the pharmaceutical industry. I knew and interacted with pharmaceutical representatives, but I never knew that nurses worked for those companies. My husband was a territory representative, who worked in diabetes at the time. My husband is brilliant, and I would rival that he knew as much about the disease state as any provider. So, when he came home and said "Babe, you should consider being a nurse educator for a pharmaceutical company.....," it piqued my interest. I asked a lot of questions about it because I did not know what it was. What is an industry nurse educator? What do they do? Who do they interact with? What does each day look like? How are they compensated? How are you measured for outcomes?

After asking all my questions, my husband connected me with a few people he knew in his network. I talked with pharmacists, PhDs, and MDs and they all loved their roles. However, I never spoke with a nurse. The background experience with people I did talk with either were educators or had some type of patient-facing experience. So, in 2010, I applied and accepted my first industry position as a Clinical Resource Nurse with a contracting company that was hired by a large pharmaceutical company. I loved it. I got a chance to combine my passion for education and patient care & provide education to front/back staff about disease state and product knowledge. The idea was that if the front and back staff were more knowledgeable about the disease state and the product then they would be an increased asset to the providers, which could decrease the burden to them (i.e., triage more patient calls). I eventually left this role after a brief time due to the excessive travel, but I knew one day I would return to industry.

People ask all the time if I miss being in practice and my answer is not really because I get to take care of patients from a different angle. When I was in practice, I would take care of patients, but it would be at the micro-level – one patient at a time. The interventions I would implement with them would hopefully impact them, their family, their extended family and so on by just word of mouth. However, working in industry as a nurse or nurse practitioner, my purview is at a macro-level and I could impact the lives of not just one patient at time, but hundreds to thousands at a time. We work with healthcare providers, academic centers, medical organizations, and patient advocacy organizations on a daily basis ensuring that each of those entities understand our products, but this is just from the medical side of our organization.

There are nurses/NPs that are in research & development, sales, clinical development, regulatory affairs, occupational health, and the list goes on. Nurses/NPs can impact industry/pharmaceuticals by so many levels. We are the most trusted profession for the 21st year in the row. We are at the patients' side longer than any other healthcare provider in the healthcare system. So, who knows the healthcare system better than us? Who can provide more insights than us? We are our own mini-advisory board within most companies and could help save thousands of dollars of fees if someone would tap into the nurse resources they already have within their companies for product development or consider hiring more nurse professionals.

I am not advocating for nurses to leave the bedside. I loved working in the NICU and would still be there had there been more opportunities for growth. What I am advocating for is options. When I was in nursing school, I was exposed to the precertification nurse within insurance companies. I got to shadow a BSN nurse who worked for a large insurance carrier and would precertify procedures for patients. Now, being a first-semester nursing student, I didn't even know this was an option for nurses. I thought it was bedside or nothing. To my surprise, I saw that there was another avenue besides being at the bedside and I could choose another direction whenever I was ready.

This is what I want to present to the world now. We will always need our fellow bedside nurses. We will always be needed in the trenches and on the frontlines. However, when the time comes that you are ready to make that transition and choose another path, please know that there is always another path....and consider industry/pharmaceutical nursing.

Author:



Tracy Wilson, DNP, MBe, MSN-Ed., RN ,FNP-C is a Director – Field Medical, Antivirals located in Houston, TX. Dr. Wilson has been with Pfizer, Inc. for almost 4 years. She has been a part of several health equity/disparities & DE & I projects in her short tenure and worked with regional and national patient advocacy organizations. She is a member of several professional medical organizations, including ANA, AANP, TNA, TNP, NBNA, NBNPA, and HBA.

She possesses a Doctorate in Nursing Practice from Belmont University. She also has a Post-Master Graduate Certificate from the University of Kentucky and is a Board-certified Family Nurse Practitioner, through AANP. She graduated from Bellarmine University, with a Master of Science in Nursing Education. She received her Bachelor of Science in Nursing degree from the University of Louisville. Dr. Wilson just recently received a MS in Bioethics and Medical Humanities from Tulane University School of Medicine, in which her thesis was on Medical Gaslighting. Dr. Wilson has spent most of her clinical career in pediatrics and Urgent Care. She also has an extensive academic career, teaching pre-licensure nursing students in community college and university programs.

Dr. Wilson is married to her wonderful husband, Otis, of almost 15 years. They have two children, O'Rylee Jaymes and Otis James "Tre' ", who keep them very busy with cheerleading, dance and sports. They are avid travelers and have visited countries such

as Mauritius, Bali, South Africa, Tunisia, Morocco, Italy, and most of the islands in the Caribbean.

Unlocking the Potential: Elevating the MSL Role for Effective KOL Omnichannel Engagement

By Jessica Wong, MBA | Summer 2023



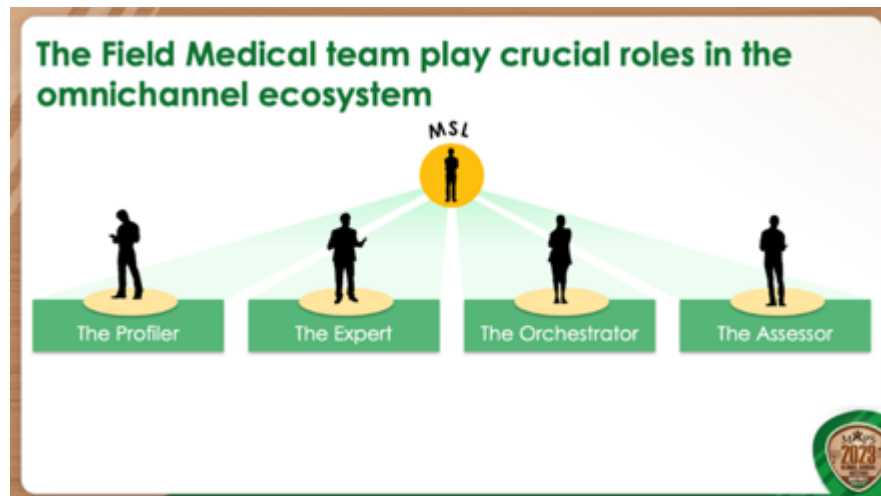
Engaging with key opinion leaders (KOLs) is especially critical to the success of the life science industry. KOLs are experts in their respective fields and provide industry Healthcare Professionals with influential insights, recommendations, and guidance. In recent years, the emergence of digital channels has transformed KOL engagement, creating a more complex omnichannel engagement ecosystem that requires personalized and tailored strategies that meet KOL's individual needs. In this new ecosystem, the Medical Science Liaison (MSL) role is central and critical to success. They must be empowered to drive optimal KOL Omnichannel Engagement.

Industry surveys suggest many organizations are thinking about or seeking to pursue 'omnichannel' approaches.¹ KOLOmnichannel Engagement, in this case, refers to the process of engaging KOLs using seamless, integrated, and tailored messaging through multiple channels, including face-to-face meetings, virtual meetings, webinars, emails, and social media. This engagement ecosystem requires different channels for different scientific exchange needs at different behavioral stages, all based on the KOLs' sentiment and preferences.² In addition, MSLs' strong understanding of the regulations and collaborative approach offers leadership characteristics that are credible to their internal cross-functional partners. Viewed by KOLs as peer scientific experts in respective disease areas, MSLs are best positioned to guide the orchestration of KOL engagement on behalf of their organizations.

In today's KOL Omnichannel Engagement ecosystem, the MSL role must be elevated as the center of cross-functional omnichannel engagement particularly in the Pipeline Education, Pre-Launch, and Newly Launched scenarios. During these

critical phases, the field medical team plays a crucial and multifaceted role in delivering and exchanging the latest scientific information with KOLs. The MSL role can be further defined as the Profiler, the Expert, the Orchestrator, and the Assessor.³

The Profiler identifies the KOLs who are most relevant to the scientific strategy and gains a deep personal understanding of their preferences, interests, and unmet needs. The Expert provides context to complex and nuanced scientific discussions by delivering high-impact in-person and virtual conversations with KOLs. The Orchestrator coordinates and manages customer-centric engagement with the right channels and content while problem-solving with the cross-functional team. The Assessor reviews aggregated data and shares real-time insights on KOL sentiments, informs strategy, and assists in course modifications.³



Source: Optimize Your Field Medical Team for the Omnichannel World Workshop, MAPS Global Annual Conference, Mar '23

The insights generated during these early phases are extremely valuable in shaping the commercialization strategy before organizational ramp-up.

To ensure that MSLs are set up for success in these essential circumstances, they must be empowered to orchestrate KOL engagement within the cross-functional organization. Then, it is critical to invest in MSL-specific people, processes, and technology support to enable effective leadership.

People: Leveling up scientific narrative personalization is a key competency to develop and nurture.

MSLs require ongoing support to stay up to date on not only scientific and treatment advancements, but also the skills involved in content personalization using approved materials and channels. Preparing, assembling, and testing variations of scientific narratives that meet KOLs' needs while ensuring global/local alignment is an important competency to hone. By elevating MSLs' ease and comfort level in delivering personalized scientific exchange, they can be further entrusted to act as the agent of KOL personalization.²

Process: Ensuring transparent and coordinated cross-functional KOL outreach is a mandate for excellence.

The life science industry must also establish useful and sustainable processes that enable MSLs and internal teammates to collaborate and communicate effectively to ensure KOLs are met with coordinated touchpoints by their organizations. This commonly reported concern should incorporate transparent and compliant methods to incentivize and inform field-based and functional partners of who's talking to whom, and when. Below represents a desired enterprise-level action plan to deliver engagement visibility and excellence, recommended by a large field medical workshop in March 2023 (n=70).⁴

1. Audit within Medical Affairs and major KOL-facing functions if a governed orchestration approach based on launch lifecycle phases, strategic imperatives, and scientific gaps is aligned and mapped.
2. Assess if internal enterprise CRM is pulling in necessary touchpoints across Medical Affairs, Commercial, and Research functions, then work to automate, fill the gaps, and close loops.
3. Synthesize and relay applicable insights and analytical trends with consistency and expediency through a collaborative and sustainable communication model.

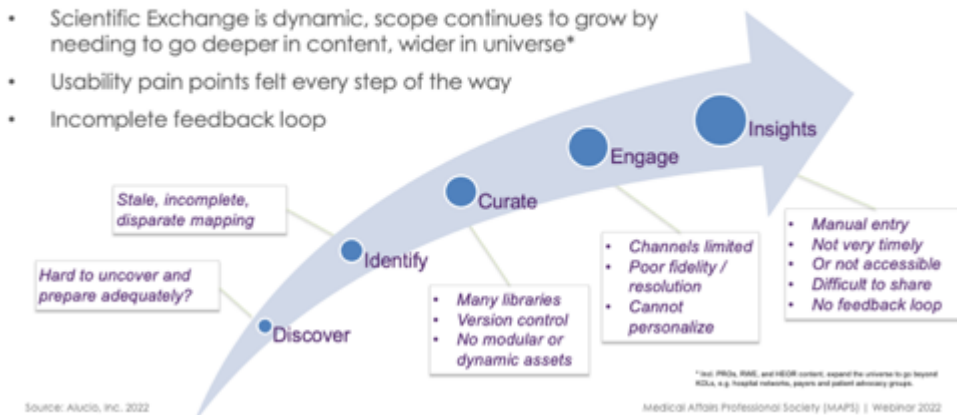
Technology: Arming field medical with modern and seamless technology capability, designed to optimize scientific exchange, is critical

for success.

Finally, the industry must provide MSLs with an end-to-end scientific exchange approach required to overcome challenges felt and seen in today's omnichannel engagement environment. How can we make the workflow simple and easy for MSLs to be the most effective scientific peer to their KOLs? Are guardrails automatically built into their workflows to enable assured customization? Can new capabilities deliver more tangible and real-time insights to aid their orchestration efforts? Let's look at how we can provide a Scientific Exchange Platform tailor-made for MSLs' content activation and KOL engagement needs.⁵

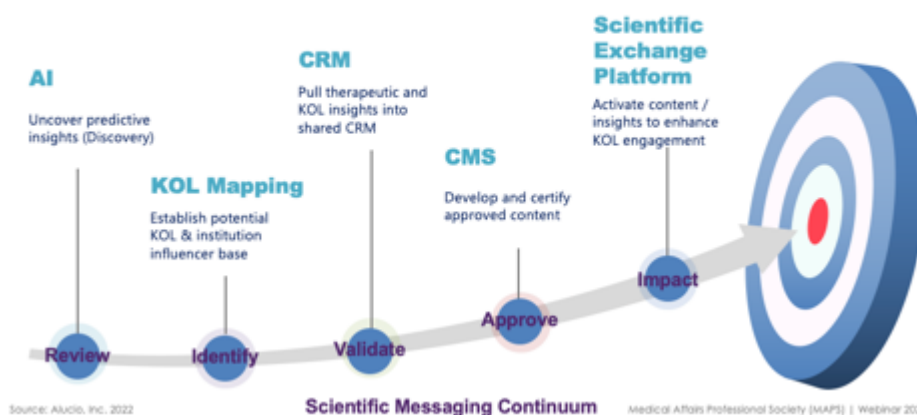
MSLs are challenged to deliver optimal scientific exchange due to a variety of cross-channel workflow hurdles, content inaccessibility, and data gaps commonly seen and experienced today.⁵

Challenges to MSL Empowerment



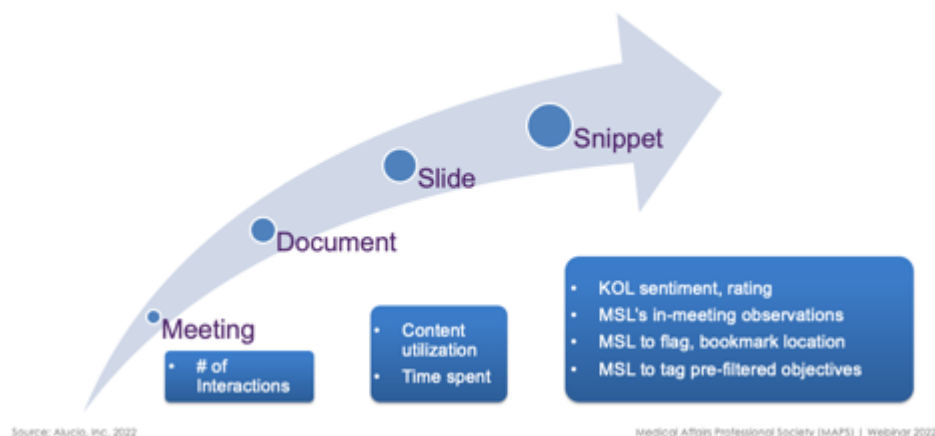
Organizations should incorporate a modern and user-friendly Scientific Exchange Platform that's designed for MSLs by MSLs, to unify critical work needs and leapfrog from existing siloed and legacy ways of working. This can help MSLs more effectively activate content and enhance KOL engagement.⁵

Modern Support to Unify, Enable, and Sustain



A critical requirement in assessing and selecting an optimal Scientific Exchange Platform is to ensure that the returned analytics is truly real-time, digestible, and useful enough to aid KOL engagement orchestration. Going beyond the basic meeting-level transactional metrics and aiming for deeper modular insights is a rapidly growing trend.⁶

Gaining Deeper Insights on Modular Interactions



Empowered MSLs, when armed with modern tools, training, and insights support that enable improved KOL omnichannel engagement and orchestration, can unlock tangible and meaningful potential for the individual, team, and organization – leading to more satisfied customers.⁵

In Conclusion:

To optimize KOL Omnichannel Engagement, the life science industry must first recognize the trusted and multifaceted MSL role as a key success factor. Then, the industry should clearly define its KOL omnichannel strategy, with the MSL in the driver's seat to steward scientific narratives while orchestrating cross-functional alignment during the critical commercialization phases.

Modernizing people, process, and technology platforms with strong communication practices can elevate and empower MSLs to deliver more effective KOL Omnichannel Engagement, ensuring that KOLs receive timely, coordinated, and personalized scientific information. This approach, when applied with a heightened design focus on customer-centric personalization, will result in an impactful KOL omnichannel ecosystem delivering better outcomes.

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Author:

Jessica Wong, MBA



Jessica Wong is a seasoned marketer with >16 years of experience in the Biopharma industry across both US and global markets. She has held successive leadership positions and advised various organizations in launch strategy, digital health & scientific communications – in the context of product development and commercialization.

Jessica has implemented numerous mission-critical and user-centric services to enable HCP disease and therapeutic education, as well as patient treatment access/adherence support. The majority of these programs are in the oncology and rare disease areas, powered by robust digital analytics and multi-channel engagement.

Before joining Alucio, Jessica worked for Roche Pharmaceuticals, Genentech, Omnicom Advertising/Digital Agency Network, closer look digital & relationship marketing agency, and Accenture. She has an MBA in Strategy/Finance from the University of Chicago, and a BA in Economics from the University of Illinois at Urbana-Champaign.

From Insights to Outcomes: Leveraging Technology to Measure Medical Impact

By Stacey Rivkin | Summer 2023

One of the core pillars of Medical Affairs is improving patient care and outcomes. Also central to Medical Affairs are medical science liaisons (MSLs), who act as scientific experts and educators, serving as a bridge between the company and the medical community, including healthcare professionals (HCPs), researchers, and key opinion leaders (KOLs).

But simply delivering information is not enough. It's critical to track how that information is transferred and applied in clinical settings to understand how patient outcomes are truly being affected. This is known as medical impact.

The significance of measuring medical impact cannot be overstated – it allows MSLs to fine-tune their educational strategies, optimize future outreach, and improve the chances of achieving optimal outcomes. However, measuring medical impact in the real world has proven quite challenging.

What Is Medical Impact & How Do We Measure It?

The Medical Affairs Professional Society (MAPS) defines medical impact as the “ability to measure how Medical Affairs activities impact the knowledge and beliefs of physicians and healthcare stakeholders to drive better patient outcomes.”

According to the MAPS, there are [several critical levels of medical impact](#) – they are all interconnected, and measuring each gets harder as the scope refines.

- The first level, and easiest to measure, is *touchpoints* (i.e., the number of MSL visits or educational programs in place).
- Then there is *satisfaction*, which measures the value of the touchpoints by understanding HCP satisfaction with the visits or educational programs.
- The next level is *knowledge*, which measures how well HCPs understand the disease and treatment options.
- Then there is *competence*, which measures whether the HCP has made any improvements to their practice as a result of the improved knowledge.
- Measuring *patient health* involves analyzing patient outcomes as a direct/indirect effect of medical activities.
- And finally, there is measuring the impact on *public health*. This evaluates the reduction of disease burden over time and is the hardest to measure.

The challenge is that there is no standard set of measurements to track the impact of MSL initiatives across these levels. However, by employing a combination of qualitative and quantitative metrics, MSLs can more effectively measure the impact of their work and craft a compelling narrative about the value they bring to the organization.

Examples of *quantitative metrics* include:

- The average amount of time per scientific interaction
- The number of KOLs identified
- The number of investigators/study sites identified

- The number of medical information requests responded to

Examples of *qualitative metrics* include:

- Actions taken and the impact of those actions
- Changes in HCP practice behaviors
- KOL feedback
- Facilitation of research studies
- Medical project support provided
- Execution of objectives

The Role of Data & Technology in Measuring Impact

In today's data-driven world, technology plays a pivotal role in measuring the impact of medical affairs. With the increasing complexity of healthcare ecosystems and the growing importance of evidence-based decision-making, organizations need advanced tools and technologies to effectively assess the outcomes of their educational outreach.

From automation, AI, and machine learning to data mining and analytics, technology is transforming Medical Affairs and enabling MSLs to track trends over time to see if their activities are making an impact. Technology can enhance accuracy, improve efficiency, drive actionable insights, and uncover opportunities for improvement. Using the latest technology to understand key performance indicators (KPIs) can help track clinical behavior to see if care gaps are being addressed.

Specifically, MSLs can leverage modern technology to improve their outreach strategies and measure medical impact in the following ways:

- *Data analytics and insights:* Medical Affairs teams can use advanced data analytics tools to extract meaningful insights from diverse data sources, such as electronic health records, claims data, and real-world evidence. Analyzing this data can help identify HCPs with care gaps and unearth other trends to inform decision-making.
- *Social listening:* MSLs can leverage technology to track and analyze activity across digital platforms – including social media, online forums, and healthcare websites – to capture sentiment, monitor discussions, and collect feedback from digital opinion leaders. This can help MSLs understand perceptions, identify knowledge gaps, and tailor engagement strategies accordingly.
- *Omnichannel engagement:* MSLs should engage with stakeholders both in-person and digitally. Technology can facilitate communication with and provide ongoing education to HCPs through digital channels including email, webinars, virtual conferences, and online communities. These platforms can track user engagement and gather feedback to help understand the impact of this type of outreach. By disseminating evidence-based information, thought leadership content, and educational resources through multiple channels, Medical Affairs teams can enhance their impact and establish themselves as trusted sources of information.
- *Real-time KPI tracking:* Pharmaceutical companies can use technology-enabled dashboards and analytics platforms to establish and track KPIs specific to MSL activities, including scientific share of voice, sentiment, clinical behavior changes and outcomes, and quality score improvement. Tracking KPIs in real-time provides insight into the effectiveness of initiatives across channels, and identifies areas for improvement. And, by integrating with EMR systems to capture real-world data and outcomes, companies can truly understand the impact of education on patient outcomes and treatment adherence.
- *Collaboration:* Medical Affairs teams can use data from various sources to enable collaboration and alignment across other departments such as research and development, marketing, and regulatory affairs. They can also leverage technology to collaborate with external stakeholders, such as academic institutions and research networks, to access and share data for research purposes to help advance scientific knowledge.

Measuring medical impact is not just a valuable exercise; it is a critical component of success in the pharmaceutical industry. Data and technology provide an opportunity to accurately measure the impact of MSL outreach to enhance patient outcomes and drive positive change.

By gaining insights into how their activities influence HCP behavior, from peer knowledge sharing to clinical decision-making, Medical Affairs teams can effectively adapt their strategies. Embracing modern tools and platforms will help MSLs improve their communications, demonstrate the impact of their activities, and contribute to evidence-based decision-making, ultimately driving better patient outcomes and advancing healthcare innovation.

Author:



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Stacey joined H1 after almost 20 years in the pharmaceutical industry including at Allergan, Boehringer Ingelheim, and Merck. She has extensive experience in a broad array of disease areas and has worked globally throughout the pharmaceutical lifecycle from early-development through commercialization. A proud career highlight was working on the Boehringer team that drove the 2016 FDA approval of Jardiance® (empagliflozin) as the first approved diabetes medication to reduce cardiovascular death in adults with type 2 diabetes.

Travel Tips

By nolie.gutierrez@themsis.org | Summer 2023



As the adage goes: an ounce of prevention is worth a pound of cure. Having been a MSL of large territories for three years, I've admittedly learned many lessons... the hard way. Ideally, reading this mixture of advice and experiences will spare you some travel strife.

Breaking this down into categories:

Rental Cars

Never assume that you will receive the type of rental vehicle that you originally selected. The best that you can hope for is to avoid the "manager's special," which is a malodorous giant van that is purportedly the only vehicle left on the lot (yes, this happened to me).

Keeping that in mind, bring a wide variety of phone charging systems that can accommodate any kind of rental vehicle port (in the case of that "manager's special" van, the charging port also moonlighted as a cigarette lighter).

Hotels

The first thirty minutes in a hotel can make or break your night of sleep.

My motto when I enter a hotel is, "never accept the first room offer." When I enter a hotel room, I spend five minutes just listening quietly for potentially offensive sounds, like street noise, nearby neighbors, etc. If my spidey sense suspects that the room will provide anything less than peace and quiet, I turn around and request a new room. (Typically, I receive a better room

with the second offer).

After obtaining a satisfactory room, I then check the alarm that is inevitably next to the bed. I've noticed a terrorizing trend in hotel chains lately, wherein the alarm clocks are automatically set to six am. This is seldom my desired time to rise and shine, so after two too many times of being ineluctably woken at six am, I'm hyper-attuned and switch off the pre-set alarm as part of the "settling in" routine.

Next, I don't have to immediately rush off to an event, I will iron the next day's intended attire. (You never know when you'll receive an iron that spurts water or gunk all over your clothes, so it's best to complete this sartorial chore sooner than later). Better yet, if able – pack business clothes that minimally wrinkle.

Lastly, speaking of clothes, ensure that you are dressed respectably when checking into a hotel affiliated with a conference or congress. You will likely run into KOLs in the lobby, and you don't want to regret looking haggard in baggy sweatpants.

Air Travel

Air travel has rebounded and is even exceeding pre-pandemic levels; if you live near or travel often to a major airport, invest in TSA Pre-Check and CLEAR to minimize delays in getting to your gate. Also invest in airport lounge access, as a quiet lounge with snacks and drinks can be an oasis in a crowded and loud airport, especially when your flight becomes delayed. Assuming that your company will not foot the bill, the most affordable way to accrue all these near necessities is to select a personal credit card that provides lounge access as well as discounts for priority TSA clearance. (I use Amex Platinum, though this by no means is a brand endorsement!)

Whenever possible, opt to fly with the same airline to accrue status, as this will reduce or eliminate fees for luggage and/or flight changes. Higher airline status can also lead to free seat upgrades, priority boarding, and better customer telephone service.

Miscellaneous

Charge all electronics to full before starting your trip. You cannot count on being able to charge anywhere besides your own home. (I once spent a hotel night in complete darkness due to a city-wide power outage).

Besides having sufficient charge, you also cannot count on being able to have reliable internet, so download all key presentations or articles before you leave home. (This too I learned the hard way, from a long wifi-less evening stuck at an Idaho airport).

Finally, these are the lightweight, indispensable sundries in my carry-on:

- 1+ packets of instant coffee
- set of disposable silverware
- eyemask + earplugs
- GUM dental picks
- extra business cards

Hopefully these tips and tricks of the trade help you to make your MSL summer travel a success!

Author:

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Elise is a Seattle-based Medical Science Liaison (MSL) working for UCB. 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.

How MSL and Commercial Teams Can Build More Meaningful Experiences for Healthcare Professionals

By Amilcar Barreto, MSc | Summer 2023



Medical MSLs and commercial teams play a critical role in educating healthcare professionals about the latest clinical research findings, disease management strategies, and treatment options. By collaborating and sharing insights, offering tailored solutions, providing education and training, building long-term relationships, and emphasizing patient outcomes, MSLs and commercial teams can build more meaningful experiences for healthcare professionals. This can result in better patient outcomes, an increased understanding of disease management, and ultimately, improved healthcare delivery. It's important for MSLs and commercial teams to continuously evaluate and adjust their strategies to ensure they are meeting the evolving needs of healthcare professionals and patients.

Two years into the COVID-19 pandemic, engaging with healthcare professionals about treatment options has never been more difficult. Doctors and nurses are overworked, stressed and tired.

In a world where we are slowly loosening restrictions, omnichannel marketing offers a radical alternative. It's about developing more meaningful, targeted and personalized messaging that integrates between online and in-person channels.

Healthcare professionals are looking for a great learning experience, nothing else matters. However, companies often fail to reconcile the need for learning with the experience provided. It's not about technology—it's about creating relevant experiences for your customers. It is important for boards and shareholders to drive organizational change. Getting your doctor's attention won't get easier in the future.

Medical MSLs and commercial teams can build more meaningful experiences for healthcare professionals by:

1. Collaborating and sharing insights: The MSLs can share the latest clinical research insights and commercial team can share market insights with the HCPs to provide a holistic view.

2. Offering tailored solutions: Based on the specific needs and preferences of the HCPs, MSL and commercial teams can offer customized solutions that align with their goals.
3. Providing education and training: The MSLs can conduct educational and training sessions for the HCPs on the latest research findings, disease management strategies, and treatment options.
4. Building long-term relationships: By regularly engaging with the HCPs and understanding their needs, MSLs and commercial teams can build long-term relationships that are based on mutual trust and respect.
5. Emphasizing patient outcomes: By focusing on the impact of the treatment on the patient outcomes, MSLs and commercial teams can help HCPs make informed decisions that benefit the patients.

In the future, MSL and commercial teams will need to continue to adapt to the changing healthcare landscape to create more meaningful experiences for healthcare professionals. This may involve incorporating more digital communication methods, such as virtual events and social media, to engage with healthcare professionals who are increasingly adopting digital technology into their daily practices. Additionally, MSL and commercial teams may need to focus more on personalized solutions and outcomes-based approaches to better meet the specific needs of individual healthcare professionals and their patients. With the increasing emphasis on patient-centric care, MSL and commercial teams will need to continue to place a strong emphasis on patient outcomes and providing education and training around disease management strategies. Overall, the future of MSL and commercial teams creating a more meaningful experiences for healthcare professionals will involve staying ahead of the latest trends and being innovative in their approach to engagement and collaboration.

In Conclusion, Medical Science Liaisons (MSLs) are increasingly leveraging the benefits of artificial intelligence (AI) to inform their work. With AI, MSLs can access and organize vast amounts of scientific data more efficiently, identify emerging trends and insights, and collaborate with cross-functional teams. This co-living of MSLs and AI can improve the quality and speed of medical information dissemination, enabling them to better serve healthcare professionals and patients.

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Amilcar shares his time working in global positions in a big Pharma company where he is responsible for multichannel & digital communication in neuroscience and rare disease and researcher in Universidade Católica Portuguesa, where he is finishing his PhD in Communication Sciences.

Mr. Barreto is a team leader and an active player in different teams creating integrated strategies. He has been working for almost two decades in different positions in marketing communications in the pharmaceutical industry and fast moving consumer goods, in companies such as J&J, Roche and Novartis.

The Role of the Medical Science Liaison and Their Knowledge Among Key Opinion Leaders in Venezuela. January-May 2023.

By Joselyn Diaz Revetti, MD | Summer 2023

The healthcare crisis in Venezuela is a tangible element of a country where two completely opposite poles coexist. As indicated by The New York Times in its edition of March 21, 2023, while televisions are being sold for \$115,000, healthcare workers receive a monthly salary of \$20 to survive.¹

Although the hyperinflation situation that occurred since 2017 has been overcome, Venezuela still ranks as the most inflationary economy in the world, with an estimated inflation rate of 125% by the end of this year, 2022. According to a survey conducted by the Andrés Bello Catholic University:²

- About 1 in 5 people reported some health problems or illnesses.
- Consultations increased to 63%.
- The gender gap in seeking medical attention has decreased (61% vs. 64%).
- 1 in 3 elderly adults has experienced some health problem, and 63% of them sought medical attention.
- The probability of seeking medical attention is 70% in the richest quintile and 58% in the poorest quintile.
- 9 out of 10 people seek the attention of a doctor, although 7% now turn to a pharmacist.
- 9 out of 10 people who sought medical attention were prescribed medication, and in 65% of cases, they had to purchase them.

Although the current economic situation is unfavorable, people seek quality healthcare.

In terms of healthcare, the population focuses more on corrective measures rather than preventive ones. That's why 9 out of 10 people were prescribed medication.

The pharmaceutical market in Venezuela grew by 12.8% in the first quarter of this year compared to the same period in 2021, according to data provided by the Pharmaceutical Industry Chamber (Cifar) to Efe.³ During the first three months of 2022, 37.67 million medications were distributed in the market, which is 4.28 million more than the same period the previous year when 33.39 million medicines were distributed in pharmacies.

Currently, Venezuela has approximately 330 laboratories and pharmaceutical companies responsible for the distribution and sale of medications in the country.³

Role of the Medical Science Liaison and their presence among the medical community in the country.

A survey was conducted in four states of the country, which are listed below:

- Capital District.
- Aragua State.
- Sucre State.

Ten Key Opinion Leaders (KOLs) were selected from the following specialties for evaluation:

- Pathology.
- Surgery.
- Dermatology.
- Urology.
- Nephrology.
- Internal Medicine.
- Pediatrics.
- Traumatology/Orthopedics.

The survey assessed the knowledge of the role of the Medical Science Liaison and the perception of the importance of clinical knowledge for therapeutic patient management.

Among the most striking results, 100% of the respondents believe that scientific research is important for professional development. Regarding medical visits, only 10% received 1 to 2 visits from representatives of the pharmaceutical industry in the last year. Only 1 KOL received an invitation to promote scientific research on medication.

The rest expressed a complete interest in the presentation of the scientific foundations of the medications held by the

pharmaceutical company.

Only 1 KOL knows or is familiar with the role of the MSL, but none have received direct information from an MSL. 70% emphasize the importance of product samples or medications, summaries of clinical studies supporting the use of the medication, and explanations from a specialist about the product.

The KOLs' perception regarding areas of improvement proposed for medical representatives includes:

- Pharmaceutical representatives should innovate in their presentations.
- The industry should provide a higher level of information.
- Reactivate visits and talks by medical representatives in public facilities.
- Restore the figure of the medical representative in Venezuela.
- Increase the frequency of visits by representatives.

In summary, Venezuela, which is still a country in crisis, continues to require the support of the pharmaceutical industry. 9 out of 10 people require medications prescribed by healthcare providers, whether in a public or private institution. Although the pharmaceutical industry exists and has a range of products available, the effective dissemination of scientific information about their products has been neglected. The role of the Medical Science Liaison is almost unknown. Healthcare professionals are willing and available to receive information and scientific updates as they recognize it as a crucial part of their daily practice.

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Joselyn Diaz Revetti is a Medical Doctor with expertise in Urology and pharmaceutical knowledge. She graduated as a Surgeon from the University of Carabobo, Aragua, in 2012. She continued her medical training as a Resident in Surgery at the Hospital Militar Cnel. Elbano Paredes Vivas in Maracay, Venezuela. She then pursued a residency in Urology at the Hospital Central de Maracay. She is currently enrolled in a master's degree in Health Care Administration and is on her path as an aspiring Medical Science Liaison.

Throughout her career, Joselyn has gained experience in various healthcare settings. She served as a Rural Physician. She also worked as a General Physician. Additionally, she held positions as a Resident in Emergency.

Joselyn's professional journey has taken her to different countries as well. She worked as a Surgical Coordinator for Medical Tourism in Santo Domingo, Dominican Republic. Later, she joined CEDIMAT in Santo Domingo as a Budget Manager. She then became the Coordinator of Dispensaries and Medical Advisor in Santo Domingo. Currently, she works as a Medical Advisor and Project Manager as a freelancer and is the manager of Infection prevention and control (IPC) in CEMDOE in Santo Domingo.

Quality-Adjusted Life Years: Measuring the Value of Health Technologies

By Jason Hurwitz, MS, PhD | Summer 2023



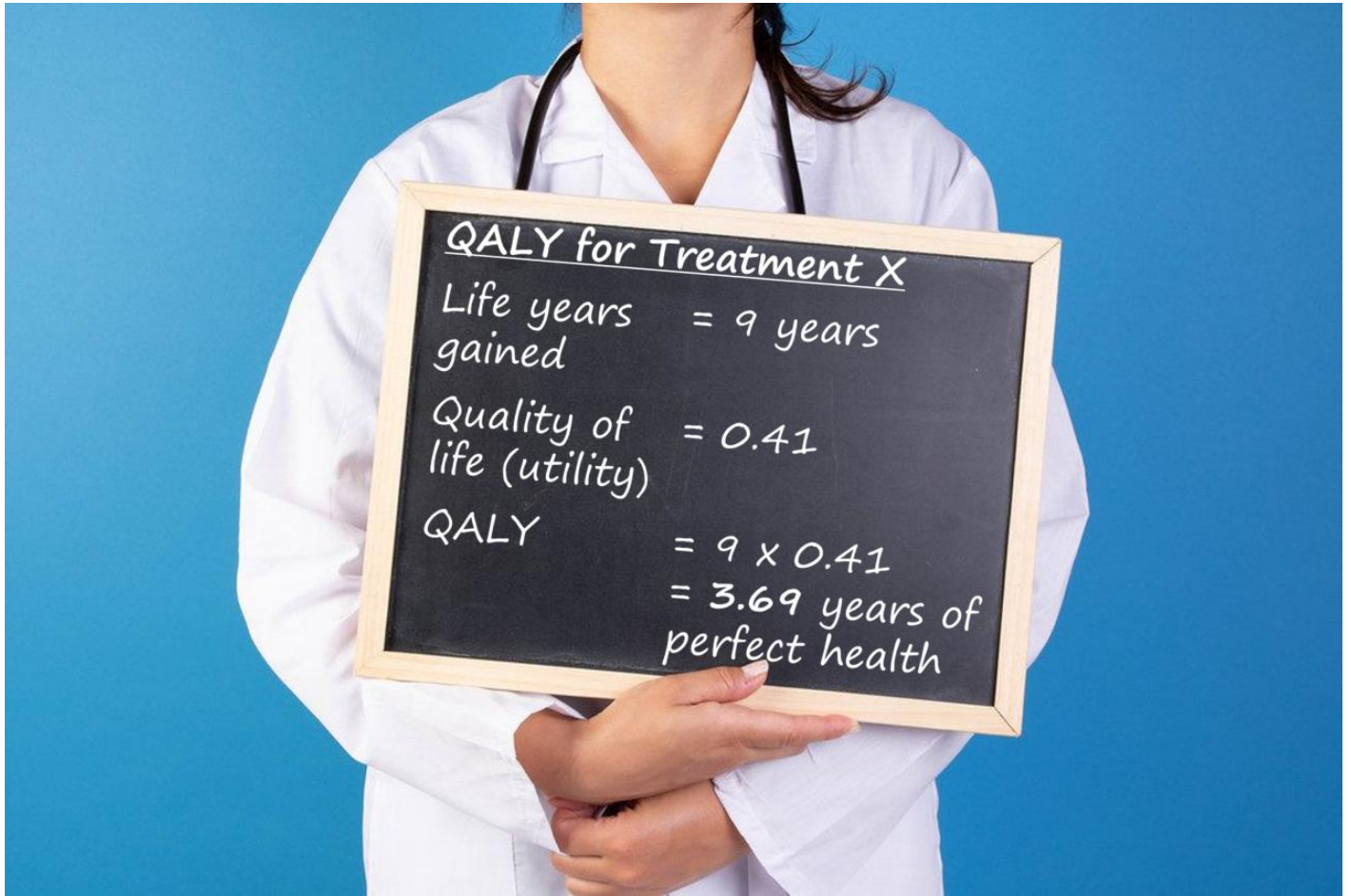
Does your health technology (e.g., drug, vaccine, diagnostic, device) provide additional health benefits compared to competing alternatives (e.g., standard of care)? How do you measure and quantify the “value” associated with the added benefits?

Value can be measured in many ways (e.g., economic, clinical, and humanistic outcomes). You could, for example, simply compare how many more years of life a technology provides over another. You could also compare improvements in the quality of life. Fortunately, a very common metric used in health economics incorporates both quantity and quality of life in a single number, called a **quality-adjusted life year (QALY)**. QALYs are often used in healthcare decision making, particularly by organizations in single-payer healthcare systems, like the [UK’s National Institute for Health and Care Excellence \(NICE\)](#), to help consider the adoption of new technologies. QALYs are also used in the US by an influential independent non-profit organization, the [Institute for Clinical and Economic Review \(ICER\)](#), to help inform pricing/reimbursement decisions.

HOW QALYS ARE CALCULATED

One QALY represents one year of perfect health. This single numeric value is calculated simply by multiplying the number of life years gained by the quality of those life years that a health technology provides. The quality of life, also called a utility, ranges from 0 (death) to 1 (perfect health), with negative utility values sometimes also possible (i.e., quality of life considered worse than death). For example, let’s say a new treatment lengthens patients’ lives by an average of 9 years, but the quality of those years, or utility, is relatively low at 0.41. This equates to a QALY of 3.69 ($=9 \times 0.41$), also shown in Figure 1. So instead of getting “credit” for adding 9 life years, the new treatment essentially provides less than 4 years of perfect health because of the treatment’s effect on quality of life.

Figure 1. Example of calculating a quality-adjusted life year (QALY).



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Before going further, you might be wondering where utility values come from. Published utility values are available for hundreds of different health states, largely from studies that survey how people rate specific health conditions. Utility values for the same health state, like ulcerative colitis in remission, often vary depending on the study respondents (e.g., people experiencing the health state, general population, care givers, or demographics [age, sex, severity, etc.]), country, measures (e.g., standard gamble, time trade-off), and publication date. Tufts' Cost-Effectiveness Analysis (CEA) Registry is an excellent repository of utility data culled from over 10,000 studies published since 1976. A quick search in the registry, for example, yielded 13 utility estimates for ulcerative colitis in remission (non-surgical) over the past five years, ranging from 0.79 to .93 (average = 0.86, standard deviation = 0.04). Thus, you can use the average and variability of several utility values, or further identify which of those studies is most relevant to your work. Table 1 provides other examples from the literature cited in the registry.

Table 1. Examples of utility values cited in the literature.

Health State	Utility
Perfect health	1.00
Diabetes, no complications	0.84
COPD: moderate	0.82
Migraine (0-3 days/month)	0.78
Angina	0.75
COPD: severe	0.72
Active ulcer	0.62
Major foot amputation	0.62
Hip or vertebral fracture	0.55
Rheumatoid arthritis (high)	0.52
Migraine (24+ days/month)	0.47
Traumatic brain injury (severe)	0.38
Depression (severe)	0.30
Death	0.00

COPD = Chronic obstructive pulmonary disease
Data pulled from: Center for the Evaluation of Value and Risk in Health. The Cost-Effectiveness Analysis Registry [Internet]. (Boston), Institute for Clinical Research and Health Policy Studies, Tufts Medical Center. Available from: www.cearegistry.org Accessed on January 23, 2023.

HOW QALYS ARE USED

When costs and QALYs are included in cost-effectiveness studies, decision makers can then evaluate the cost per QALY gained between two technologies against a predefined cost per QALY threshold representing a payer's maximum **willingness to pay** for one additional QALY (i.e., one additional year of perfect health). The lower the cost per QALY, the more **cost-effective** the technology, indicating better value for money. Because QALY is a standard unit of analysis, it can also be used to compare different health technologies and conditions.

In the US, a widely adopted threshold advocated by the ICER organization and others is to consider any technology under **\$150,000/QALY** cost-effective, and further, that any technologies over this amount should lower their pricing. Professional/clinical practice organizations may also recommend cost/QALY thresholds in specific therapeutic areas. For example, the recent [2022 AHA/ACC/HFSA Guideline for the Management of Heart Failure](#) by the American College of Cardiology/American Heart Association Joint Committee on Clinical Practice Guidelines considers treatments over \$180,000/QALY to be low value.

LIMITATIONS OF QALYS

A QALY represents both quantity and quality of life in a **single generic metric** that can be used in the **comparative evaluation** of health technologies and conditions. Despite these key advantages of a QALY, there are also several technical, ethical, and practical limitations of its use.

As mentioned above, utilities for the same health condition can vary depending on how they are measured (who, when, where, and what instruments) raising concerns about the **validity of a QALY**.

Ethical concerns center on how QALYs limit gains for, and therefore **discriminate against**, (a) the elderly who have fewer life years to accrue QALYs, and (b) people with disabilities or chronic conditions whose utility can never reach perfect health.

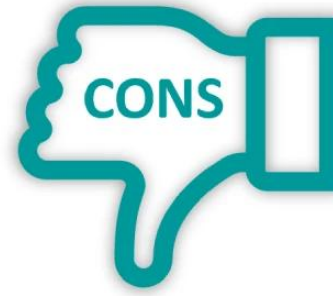
In practice, cost per QALY thresholds help determine value, but **should not be used alone for decisions** to adopt, afford, or access new technologies. And while established cost per QALY thresholds are sometimes perceived as another advantage, based often as a function of per capita gross domestic product (GDP), these **thresholds are largely arbitrary**.

Finally, a QALY may be **less relevant than outcomes based on “natural” units** of clinical effectiveness for some therapeutic areas or decision makers (e.g., amount of reduction in blood pressure, migraine episodes, depression symptoms, tumor size).

Figure 2. Pros and cons of using QALYs.



- Single metric that incorporates quality & quantity of life
- Can compare across different therapeutic areas & technologies



- Validity concerns
- Bias against age & disability
- Should not use alone for decisions
- Arbitrary thresholds
- Sometimes less relevant than other outcomes

CURRENT STATUS

Researchers and policymakers have been **exploring alternatives to QALYs** and their use in the decision-making process for decades. Examples include disability-adjusted life years (DALYs), with a long history in the literature, and a relatively new metric that the ICER organization now reports alongside QALYs, [Equal Value of Life Years Gained \(evLYG\)](#). In the meantime, QALYs continue to play an important and influential role in assessing the value of new healthcare technologies.

Disclosure: Jason Hurwitz is not affiliated with any organizations mentioned in this article.

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A Field Medical Science Liaison's (MSL) Perspective of Tech-Enablement Using the Metaverse

By Marie Latsa, PharmD | Summer 2023

To many, the metaverse may be a nebulous term that is difficult to conceptualize. Adding to the obscurity is a lack of publications that share results from utilizing the technology in a regulated industry setting, such as the biopharmaceutical space. In this issue of The MSL Journal, Shim and colleagues report findings from utilizing the metaverse during a portion of clinical training for a group of MSLs. The authors found that use of metaverse technology during MSL training provided an engaging, dynamic, and interactive environment conducive to learning as demonstrated by all participants passing field certification. I was personally able to experience these results firsthand as a member of this pilot group of field medical professionals. My objective with this piece is two-fold: (1) to share my perspective as an early adopter of the metaverse in medical affairs and (2) generate further discussion around its operationalization and future applications.

I found my first experience in the metaverse to be user-friendly and intuitive. Just like any other web-based platform, our team was sent a link that navigated us to a page where we were prompted to input basic information such as our name and company, check audio compatibility, and even pick a color for our avatars. Although these prompts differ from what I am used to adjusting before a meeting in a 2D setting, I didn't find them cumbersome or clunky, and in fact I found them fairly easy to do.

Once the upfront settings were taken care of, my team members and I entered into a virtual convention center-like environment. We were able to use our arrow keys to both move around the space or accidentally bump into one another, whichever came first. The latter being a source of constant laughter and a welcomed reminder that we were in this learning setting together. If there was ever a time when a team member needed help, you'd see avatars congregate towards him or her to troubleshoot. Having never met any of my colleagues in real life, this was a glimpse into a different side of their personalities I hadn't been able to see before. Surprisingly, I found myself engaged and excited to be around my intelligent, funny, and kind colleagues. I also found myself feeling a new and renewed interest in how I'd be learning my MSL curriculum. We were given a tour of the virtual space and learned there was a main stage, some round tables, and an elevator to access the

second floor, all of which would be utilized during our training. The different elements of the space were able to accommodate the different components of our upcoming field certifications. As I entered the metaverse, I saw a proactive medical slide deck flashed on a separate screen along with a reactive Q&A deck on another. These were a few of the training resources we were expected to know for our field certifications. Spatial audio also enabled us to simulate face-to-face HCP interactions through side bar conversations out of virtual earshot from the rest of the group.

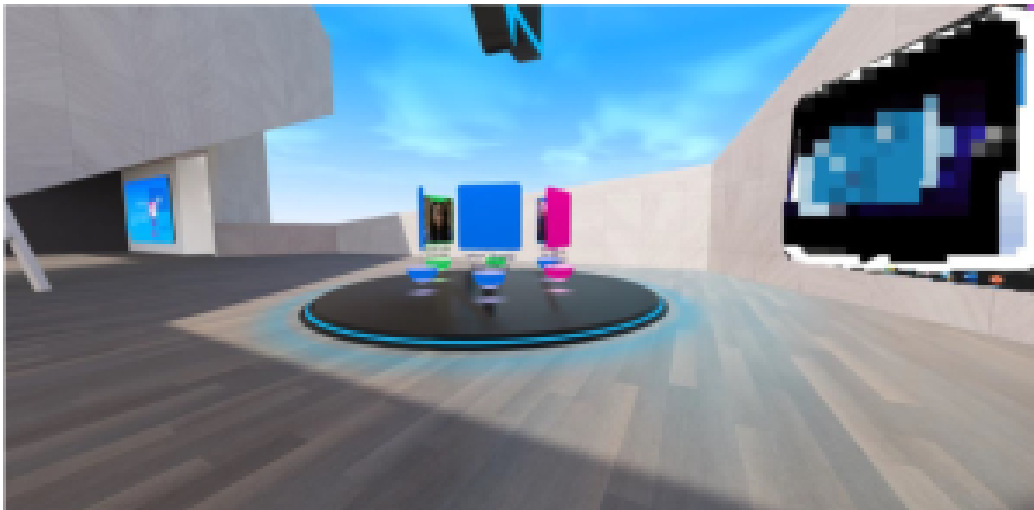


Figure 1. My colleagues and I having a roundtable discussion in the metaverse. Photo by Michael Shim, Pharm.D.

In my opinion, these functionalities provide additional opportunities for MSLs to exercise awareness and tailor or her learning journey to address self-determined knowledge gaps. I believe the metaverse training environment had a positive impact on my learning comprehension because I was able to develop confidence in my own ability to navigate the different scenarios that were forthcoming in the field in parallel to sharpening my scientific acumen.

Looking forward, there remains a need to further explore concerns related to the use of the metaverse or other technology platforms in a regulated industry; areas of focus include privacy, security/encryption, and compliance with organizational policies and local laws. But the important thing is that we continue to ask questions in order to advance the profession. In hiring for diversity on teams, how can we use the metaverse to glean different perspectives from MSLs with varying clinical backgrounds? What benefit does the metaverse provide to different types of learning styles (i.e., auditory vs. visual learners)? Will undergoing dynamic learning in the metaverse positively impact team building, self-confidence, and/or rapport in the field? We owe it to ourselves, our HCP colleagues, and most importantly, patients to push the boundaries and create new best practices. I'm proud to be a part of a profession that values innovation and can't wait to see what new metaverse milestones are accomplished next.

Author:



Marie Latsa, PharmD

Marie Latsa currently serves as a Community Medical Director with Syneos Health®. Her previous roles of increasing responsibility within Syneos Health® have enabled her to bring nearly 5 years of oncology experience throughout the product lifecycle to her current role. She is inspired by the positive influence of effective communication on healthcare outcomes and strives to bring an innovative and solution-oriented mindset to brand and other medical challenges

What Do You Want? The Value of Coaching in Career Development

By Colleen Zimmerman, CPC | Summer 2023



This article is written from two perspectives: one is the experience of someone who is working with a coach (the client) and the other is the perspective of a coach.

The Client Perspective

A favorite quote of mine is from Warren Buffet: “The best investment you can make is in yourself”. As MSLs, we know the value of investing in ourselves and our careers. We invest our time in building a professional network carefully and intentionally. We join professional societies like the MSL Society to connect, to learn, and grow our profession. We dedicate time to identifying and working with mentors to learn best practices for success in the field and the industry. These three elements complement each other and set us on the path to achieving our goals. Adding to this synergism is coaching from a certified professional coach (CPC).

First, let’s distinguish the difference between a mentor and a coach. A mentor functions in an aspirational and advisory role and is an expert in the field who shares best practices. A mentee learns from the successes of the mentor by asking questions of the mentor. The focus of the relationship is the development of the mentee. The mentor-mentee relationship is long-term and fluid.

A coaching relationship differs from mentoring as it is focused on specific personal or professional goals. Coaching provides a space for self-reflection and evaluation and a coach guides the client to find the answers and determine what needs to be done to achieve a goal. A coach does not provide answers but asks questions to help clarify goals, create action plans, uncover obstacles and barriers, and increase self-awareness. The coach-client relationship is typically short-term or has a set time frame depending on goals established by the client.

I sought a professional coach when I realized that although I had a goal and a plan, I was not executing the plan; I was not moving forward. I was distracted and had fallen off my intended course by my inability (or unwillingness) to evaluate what was important to me and what would move me closer to my goal. I recall my coach telling me (and me being somewhat skeptical) that I had the answers, and she would help me realize and act on those answers. True to her word, she guided me to the answers and then she celebrated with me in my success as I reached the milestone markers towards my goal. In between our scheduled Zoom calls, she would text me as a reminder to stay focused on the actions I wanted to undertake to ensure I was making forward progress.

With the emphasis of coaching being on outcomes, I opted to work with a coach who was not from the pharmaceutical industry. The principles of success are similar across different industries. What was important to me was her leadership experience and

success in her respective field before she became a CPC. Her coaching style and personality matched with what I wanted from a coach. I looked forward to our calls because I knew we would celebrate even the smallest steps forward and when I fell off course, she was there to guide me back on course without judgment.

The Coach Perspective

As a certified professional coach, it is an honor to be asked to serve as a trusted and strategic partner in a client's journey to achieve their goals. What do you want? It is a key question I ask when first meeting with a client as my all-in focus is on the client and what the client wants to achieve.

A coach helps elicit goals, challenges, options, and action steps from each client based upon the understanding that they are their best expert. It should be noted that coaching is not mentoring, consulting, therapy, or training but a process of uncovering on a path to self-awareness and enhanced perspectives. Coaching is, according to the International Federation of Coaching, a thought-provoking and creative process to inspire clients to maximize their personal and professional potential. It often unlocks untapped sources of imagination, productivity, and leadership.

I start a typical coaching session by asking if the client is in a quiet and safe place to have an open and direct conversation. Client safety is key to establishing trust in a coaching relationship. I ask what topic the client would like to discuss and what outcomes they want to achieve during their time with me. The session takes shape from that point with the client sharing information and me asking questions to further examine the topic with a goal of achieving the desired outcome of the session that was determined at the start of our talk. Many times, a client will create an action plan with defined action items or they may wish to create a list of matters that need attention, action, or simply need monitoring; or a client may wish to share reflections that were learned from previous sessions and discuss how the new awareness can remove or create a challenge. We discuss what is top of mind in the path to the client's desired final outcomes.

In between sessions, I may provide accountability or encouragement if the client wants a nudge or boost of confidence. This is especially helpful if a client is facing a difficult situation and wants me to be there providing support. It is key to remember that coaching is all-in focus on the client and the client's desired goals and outcomes.

I love working with coaching clients because they want to be successful. They are willing partners in their own success. It is a great day when I receive a text or phone call with the exclamation, 'It worked! I have crushed that barrier to smithereens and did it!'.

Of course, they did it! They did have all the answers. I was just alongside the client helping to provide clarity, confidence, and accountability to reach that goal.

So dear reader, let me ask: what do YOU want?

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Colleen Zimmerman is widely known as a strategic yet fun collaborator with a transparent and authentic approach to work. She is the founding principal of Leaders in Development and a Senior Partner with the management consulting firm, Ideas for Action.

Colleen is a graduate of the University of Kansas and a Fellow of the Institute of Coaching, a Harvard Medical School Affiliate.

Do You Have a Fun Calendar?

By Jill Donahue, MadEd, HBa | Summer 2023



My friend Marcel called me last night. He and his wife, Kathryn, were working on their ‘fun calendar’ for the new year and wanted to pencil us in.

“How about a bike ride through the old rail trail followed by wine and pizza from our backyard oven?” he proposed.

Well ... heck yes! I’m in! Not only was I in, but it also got me thinking about my own ‘fun calendar’ ... or rather lack thereof! Why don’t I have a fun calendar? I wondered. Isn’t fun important enough to prioritize?

According to Catherine Price, who delivered one of the top 10 most popular [TED Talks](#) of 2022, fun is a secret to living a healthier life. It creates energy and helps us thrive. And when you thrive as an MSL, you help HCP’s and patients thrive!

Magic happens when we experience fun. Making sure that you have fun in your life will make you a better partner, parent and MSL! We all want to love life, feel joy, and experience happiness—and FUN is a key component.

While I believe that fun is vital for a meaningful life, I don't always prioritize it. What about you? Do you make time for fun?

Maybe if we knew how to make fun, we could enjoy more of it in our lives. Knowing the importance of fun and the role it plays in our well-being, here are the four steps to creating fun adapted from Catherine Price's TED talk:

Four key steps to fun

1. **Connect**

Even for introverts, connection involves other people. Marcel actually called me instead of texting—and I actually picked up! Not only did I enjoy receiving the invitation, but the call itself was fun because it was an opportunity to connect with Marcel and catch up. So, stop scrolling and start interacting. Need help connecting? Check out Catherine Price's book *How to Break Up with Your Phone*.

2. **Be playful**

Don't take yourself too seriously. Let your guard down and find opportunities to rebel in playful deviance. Try to get a kick out of your own life. "But I deal with heavy stuff everyday – serious health concerns," you say. I know. But my friend who is going through radiation for her cancer inspires me every day to be playful. "I put together a playlist for my drives to the hospital and was so into singing along that I almost missed my exit," she told me once, laughing.

3. **Find flow**

Reduce distractions to allow yourself to get into the zone. You know that feeling when you're so focused on what you're doing that you lose track of time? That's flow. You can't have fun without flow.

4. **Prioritize it**

Add fun to your schedule! Make your own 'fun calendar' and fill it with activities. You might even consider calling a friend to book a bike ride and pizza party! But most importantly, be open to fun, however it happens. When it appears, embrace it as an integral part of every day.

Life is serious. We have serious problems to manage. In your work as an MSL, you are helping doctors change lives. That's serious business.

But perhaps—amidst the seriousness of what you do—fun can help. After all, it can help us become more present, united, and connected so we can work together better and solve healthcare challenges faster. Perhaps fun is the health intervention we all need to bring more energy to our lives. And perhaps fun should be added to our to-do list—to empower us to thrive and live our best lives!



Jill Donahue, MadEd, HBa has dedicated her life to empowering MSLs with the power of their purpose and seeing them love their work more and become even better at it. As a consultant, speaker, author, coach, and founder of Excellerate, she shares solutions and empowers them with the skills and confidence to serve HCPs—and ultimately, patients—more effectively.

Jill is living her purpose by helping MSLs live theirs through [The Power of Purpose](#).

When “K” and “D” Overlap in Engaging with Opinion Leaders

By Jodi Tainton RN MBA | Summer 2023



Today, medical plans routinely incorporate a digital strategy, and the terms “omnichannel” or “content creation” are on the lips of most Medical Directors you meet. Medical Affairs is increasingly driving digital strategy, and interest in Digital Opinion Leaders is growing. Chances are, as a Medical Affairs professional, you are keen to engage these influencers of the medical world to gather insights and fulfill your medical objectives.

Who are Digital Opinion Leaders?

Digital Opinion Leaders, or DOLs, are highly influential individuals or groups in online communities who are trusted for their advice, opinions, and information. They communicate extensively through social media and are perceived as credible thought leaders. DOLs gain digital respect irrespective of their offline reputation. A DOL’s impact comes from its ability to increase message visibility (reach), generate audience engagement (resonance), and address critical issues for its audience (relevance).

Where do DOLs come from?

DOLs have various profiles, either as individuals or organizations active on social media

- Digital KOLs (DKOLs) – Traditional KOLs.
- Healthcare Professionals (HCPs) – Clinicians, nurses, and scientists exchange opinions on therapies, patient care, and conference presentations.
- Patients and Caregivers – Individuals active on social media.
- Social Opinion Leaders (SOLs) – Digital influencers for health communication can include journalists, authors, and healthcare bloggers who cater to the public and patients.
- Patient Advocacy Groups (PAGs) – Online patient associations and advocacy groups.
- Publishers – Online academic journals and publishers disseminating medical data.

Why do DOLs matter?

Digitalization has changed how healthcare stakeholders interact. HCPs, patients, and others are now active in the digital space, creating a new engagement environment focused on conversation, education, and community development. The rules and players for digital opinion leadership are different from traditional models, relying on social media trends and audience engagement in addition to scientific knowledge. DOLs are experts in new content formats and drive the adoption of innovative technologies. To engage with DOLs, we must update our content strategy to connect with new communication forms and reach a

wider audience. DOLs have an increasing influence on Social Media Platforms (SMPs), where they cater to the needs of their audience, aiming to expand their reach and gain respect in the social media community. They achieve this by adding value to their followers, offering interaction, education, and up-to-date information.

Why do DOLs matter?



DOLs are a larger group than KOLs and have some overlap with the category of “Digital KOLs” (DKOLs) but exert their influence differently from traditional KOLs.

	Traditional KOLs	DOLs
Source of influence	Their professional background (knowledge and expertise)	Their professional background supports their social media presence, credibility is reflected in their content, and audience engagement confirms this
Profile specificities	Medical authoritative figures (individuals), limited online presence, smaller audience (similarly qualified HCPs)	Not necessarily medical authoritative individuals, solid online presence, and wider audience
Content production	Predominantly research papers and clinical studies that can take weeks to produce	More varied (posts, articles, tweets, videos, podcasts etc.) and can be produced quite quickly

Why do DOLs engage in social media?

DOLs aim to expand their reach and boost their reputation on social media platforms by meeting the diverse demands of their audiences. They achieve this by engaging with their followers, obtaining knowledge, and staying current offering relevant content.

They drive interaction by:

- Connecting with HCPs, patients, and everyone.
- Asking the community for advice.
- Driving debate and discussion (e.g., challenging common practices among HCPs).
- Sharing personal experiences and hearing patient success stories.

Continuously learn:

- HCPs: Improve clinical practice by learning from peers and accessing educative content like patient cases, pedagogical videos, online conferences, and webinars.

Patients and lay public: Increase awareness and education on a disease.

Everyone: Mutually learn from other stakeholders (HCPs can learn from patients' experiences and vice-versa).

Are on the cutting edge of the science:

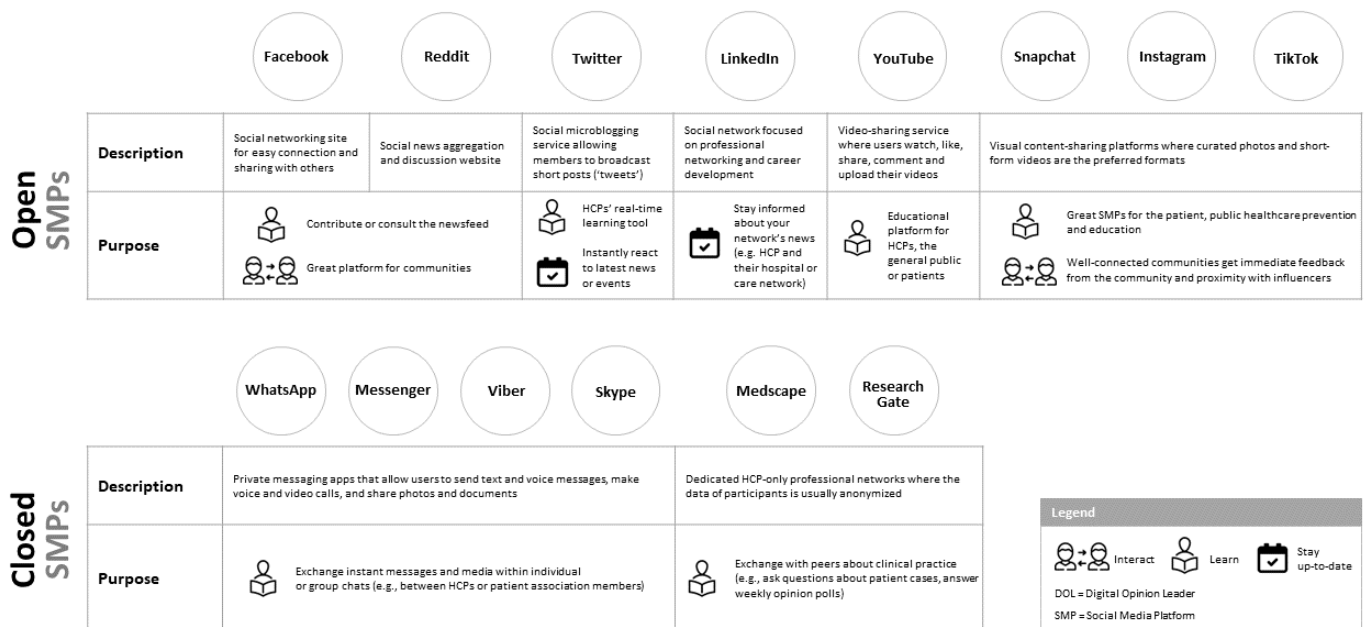
- Provide the latest news and insights using recent data on clinical trials and studies, drug approvals, guidelines, and medical articles.
- Discover results presented during congresses and conferences.
- Find and share new information on hot topics, such as testimonials and tips on specific questions.

Where do DOLs play?

DOLs usually use Social Media Platforms (SMPs) that can either be open, closed, or hybrid open-closed, as follows:

- Open SMPs are networks/apps where users share content accessible to everyone. Examples are Twitter, Reddit, YouTube, Snapchat, Instagram, and TikTok.
- Closed SMPs are networks or apps where the content users share is only accessible to a limited audience, hidden from public view. Examples are WhatsApp, Messenger, Viber, Signal, WeChat, Line, and Skype.
- Hybrid open-closed SMPs are networks with both "open" and "closed" settings; content can be shared publicly or within a closed group/page/community like Facebook or LinkedIn.

Where do DOLs play?



How do you plan engagement with DOLs?

Developing engagement strategies with Digital Opinion Leaders (DOLs) is a crucial component of rethinking your organization's engagement with external stakeholders in the digital realm. A solid DOL engagement plan should include three main factors:

Initiation plan:

- Determine the medical context: What digital channels can your organization access? Do they align with the social media used by the DOL? How do your HCPs and patients prefer to engage?
- Define your DOL engagement objectives: What do you want to achieve, what reach are you hoping for, by when, and how?
- Identify, profile, and prioritize the DOLs: Select DOLs whose interests align with your strategic ambitions, are

aligned with your organization's ethics and address these objectives (DOL Mapping). Qualitatively assess the selected DOL to enrich your understanding and prepare the ground for a win-win engagement strategy (DOL Profiling).

Engagement strategy:

- Address compliance and governance rules at the start, including good practices for DOL engagement.
- Determine the engagement tactic your organization can practically use when engaging the DOL. Activities like Tweets, LinkedIn, Facebook or Instagram posts, blog articles, infographics, webinars, podcasts, and more are tactics you can implement.

Close the loop:

- Measure and evaluate activities done with the DOL relative to your medical objectives.
- Broadcast the insights you have gained to your aligned internal stakeholders.
- Improve your engagement plan by adjusting the DOL engagement tactics.

DOLs engagement planning step-by-step process



Conclusion

Effective DOL engagement begins with a shared value proposition linking your organization's objectives to theirs, with both parties aiming to improve patient outcomes. Focus your DOL engagement on building long-term, fruitful relationships rather than short-term transactional interactions. To achieve this, consider a DOL as a partner rather than a service provider. It is essential to build a trustworthy relationship. Always ensure two-way communication with DOLs by stating your objectives and vision clearly and transparently, while listening to their needs and grasping the driving force behind their influence. This allows you to identify relevant areas of collaboration and mutual benefits to ensure successful engagement. Before any first contact with a DOL, understand their past and present relationship with your organization and competitors and thoroughly assess their reputation. Finally, although we focus on the digital sphere and social media ecosystem, build a good relationship with DOL on and offline.

Authors:



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Amit is a strategic, engaging, and energetic Medical Affairs professional with a strong entrepreneurship mindset. He has significant Medical Affairs digital experience inside and outside the pharmaceutical industry across a broad range of projects, including big data analysis, project management, business planning, digital coaching, and onboarding. He has been in multiple roles in the pharmaceutical industry for over three years. Before that, he has 10+ years of experience in the medical and clinical research industries across different therapeutic areas, managing bench side to bedside projects. He is the developer and founder of the 3P – Pharmaceutical Pipeline Products app (iOS and Android) that provides curated and up-to-date information on pipeline products. Lastly, he is the digital lead and an executive committee member of MAPA (Medical Affairs Professionals of Australasia) since 2021. The views expressed in this article are Amit's own and are not representative of the organizations he has worked for.



Jodi Tainton

Based in Australia, with 25+ years of experience in the pharmaceutical industry, including nine years in Medical Affairs, Jodi is currently at Pfizer as Senior Manager Field Medical Excellence, developing medical capability, field medical strategy, and managing a team of Medical Scientific Liaisons. Jodi is the medical excellence lead and an executive committee member of MAPA (Medical Affairs Professionals of Australasia). Prior to Pfizer, she worked alongside learning experts at New York-based Salience Learning, developing programs and capability assessments for global Medical Affairs teams based on cognitive behavioral science. At Allergan, as Director of Global Medical Excellence for Asia Pacific, Middle East, and Africa, she created capability frameworks and onboarded and trained Medical Affairs teams. At Allergan, Jodi was a Medical Science Liaison, Medical Advisor, and Regional Scientific Expert for Eye Care. Before working in Medical Affairs, Jodi gained extensive commercial pharmaceutical experience in roles ranging from Bayer Biological Products Business Manager ANZ, National and Regional Sales Manager at Bristol Myers Squibb and Allergan, and as a Hospital Specialist Representative at Shire, Bristol Myers Squibb, Bayer, and Knoll. Clinically, Jodi worked as a Registered Nurse. As a lifelong learner, Jodi completed an MBA in 2022, Graduate Certificate in Leadership and Strategy, and a Graduate Diploma in Management in 2021. The views expressed in this article are the author's

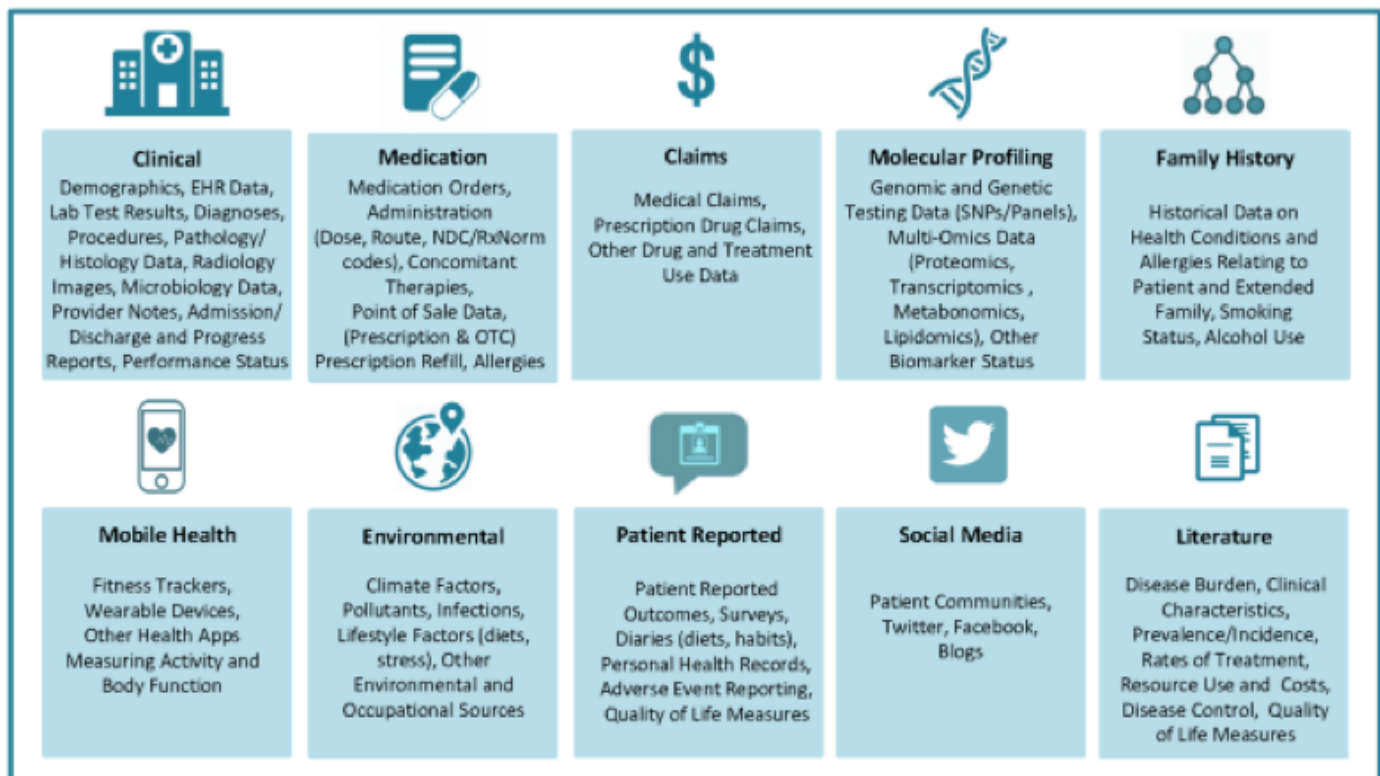
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The Value of Qualitative Research Skills in the MSL Role

By Susan Holmes-Walker, PhD, RN | Summer 2023

The role of the medical science liaison (MSL) requires a unique skill set to be successful. The ability to accurately discuss scientific data and engage with Key Opinion Leaders (KOLs), Thought Leaders (TLs), and clinically practicing providers is one of these skills. The ability to engage in compliant, open-ended, unbranded discussions regarding the science of disease management, including safe and efficacious ways to support our patients diagnosed with various illnesses, is the foundation of these meetings.

During onboarding for my first MSL role, a significant focus of education for our team was focused on how to effectively engage with all levels of providers to obtain insights as one of our key performance indicators (KPIs). Early on I began to understand, and value, how my training as a qualitative researcher would be of great benefit as an MSL. I also learned to appreciate how my experience collecting real world data as patient reported outcomes during my time as a project manager for a continuous quality improvement project would also be of great benefit in this new role (Swift et al, 2018).



Qualitative research training prepares one to explore and provide deep insights into real-world problems, as well as gather information on participants' experiences, perceptions, and behaviors (Tenny, S. et al 2017). In my opinion, experience as a qualitative researcher creates a unique ability to approach KOL engagement and discussions on the management of disease states with a different lens. Qualitative research, drawing on the perspectives of both healthcare professionals and patients, has played an increasingly important part in progressing the understanding of why clinical trials succeed (or fail) (Norman, J.E et al 2021). The recent focus on the value of real-world data, often presented as patient-reported outcomes, is a great example of the increasing value of qualitative data and how it can inform the decisions made by KOLs to manage their patient (Liu & Panagiotakos, 2022).

Engaging with a licensed prescriber, either in-person or virtually, requires intentional preparation to guide the interaction allowing for the collection of actionable insights. Due to time constraints faced by providers in ambulatory care settings, the

importance of a pre-call plan to increase the value of the meeting is greatly appreciated. High-quality interview skills help the MSL by allowing one to stay focused and maintain control of the interaction while allowing for a natural flow, exchange of information, and collection of insights. Qualitative research interview skills are a viable and highly utilized data-collection tool (Jamshed, 2014). These skills are extremely helpful when meeting with KOLs, TLs, and licensed providers who continue to provide direct patient care.

Given that timely engagement of KOLs and obtaining actionable insights, which can be viewed as real-world data, are key performance indicators for professional and financial success in the MSL role, understanding how to be an effective interviewer is of great importance. Cormac et al (2019) offer the following tips for a successful interview: (a) prepare yourself as an interviewer by constructing an interview guide, or pre-call planning worksheet to maintain time management; (b) build rapport with the KOL; (c) understand you are a co-creator of the data or insight; (d) talk less and listen more; (e) be flexible and adjust as needed; and (f) document the interview in a timely manner to concisely capture actionable insights. One last tip is to leave preconceived notions of possible insights before a meeting at the door and let the discussion flow. KOLs have valuable experiences. Assuming before the meeting begins that no new information because of previously obtained insights can cause the MSL to disengage and not be open to hearing unique perspectives from each KOL appointment. It is of primary importance for the MSL to modify questions on the pre-call planning sheet and change the direction of the discussion and facilitate obtaining a new insight with a different perspective.

Respectful scientific engagement with KOLs can create a strong foundation for a peer-to-peer relationship and makes it possible to obtain actionable insights. Increased understanding of how science drives KOL patient care decisions, including selection of a medication or medical device to manage a disease state, can be achieved by asking the right questions. Actionable insights may also lead to the development of a new pipeline for the selected treatment.

Organizing the valuable insights obtained into categories, or themes, is important to manage the KPIs. If the insights obtained begin to sound the same, it is the MSLs job to use this real-world data to inform changes to the pre-call planning worksheet to better guide for future engagements. Data saturation is a qualitative research term used when it is determined no new information can be obtained from interviews and/or observations (Morse, 1995). Given each KOL has unique experiences based on research and/or clinical experience, a good MSL can skillfully guide the engagement to facilitate obtaining an insight with a new, unique perspective.

In conclusion, utilizing qualitative research skills can help the MSL obtain unique, actionable insights to guide the management of disease states, create new pipelines, and ultimately improve patient care.

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