WHITE PAPER

Future of medical affairs: Scaling knowledge dissemination with transformative approaches

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Medical science liaisons (MSLs) have long been—and still are—the gold standard for reaching key opinion leaders (KOLs). But as go-to-market (GTM) models evolve and technology advances, medical affairs has an opportunity to invest in nonpersonal and digital education to reach KOLs through channels and sources that are effective and economically efficient in the long term.

Today's GTM models are shifting quickly as they become predominantly driven by a rapidly changing customer model with newer customer groups, including primary care physicians (PCPs), patient advocacy groups (PAGs), digital influencers and others whose needs span across a wide range of information topics and levels of complexity. Additionally, there is a need for medical affairs to be increasingly productive and agile in its crucial role of education by disseminating scientific information in a cost-effective yet impactful way.

Measuring the impact of medical affairs, however, is challenging due to the lack of direct indicators. Unlike commercial sales, the impact of medical affairs takes time to show, but has lasting implications—such as successful launches, better treatment options, improved access, and most importantly, enabling pharmaceutical companies to continually invest in future molecules. Therefore, in response to key landscape trends, it's crucial to design agile strategies that consider compliant impact metrics.

With these nuances in mind, medical affairs leadership often asks, "How do we make our organization future-ready? How do we become world class?" Organizations are striving to leverage data and technology to drive better decision-making for medical affairs as the bedrock of future scale. Let's take the example of nonpersonal engagement: It's a win-win for both internal and external stakeholders. For internal stakeholders, digital broadens customer access and enhances engagement capacity through travel efficiencies. For KOLs, it offers convenience, flexible scheduling, personalized resources—such as presentations and infographics—and more frequent touch points.

How do we define nonpersonal engagement? It refers to reaching KOLs through sources and channels like websites, online video meeting platforms, live and interactive webinars, mobile applications, congresses and more. However, it's worth noting that an MSL and a KOL meeting virtually is not considered a nonpersonal engagement.

As we strive to redefine and scale scientific education dissemination, key trends indicate that increasing innovation and changes in the medical affairs GTM model will require organizations to adopt a digital and nonpersonal strategy, embrace AI and adapt to changes in physician behaviors and accessibility. Understandably, many industry leaders have key questions surrounding nonpersonal channels. Firstly, it is whether their upfront investment is justified—and the answer comes down to proving a long-term return on nonpersonal investment compared to traditional personal, which remains the best-in-class standard and delivers quicker results.

Another key consideration that exists in the minds of medical affairs leaders is whether nonpersonal channels can match the level of personalization or personal connection that personal channels provide. But with the advent of tech and AI, it's possible to attain a deeper level of personalization via nonpersonal channels, potentially replicating an impact traditionally associated with personal.

At the same time, as in other fields, the advent of technology also causes the industry to question its continued investment in MSL teams when scientific information is readily available via so many other mediums. Most organizations still invest heavily on the personal or field medical side, maintaining the longstanding belief in the impact of MSLs. While organizations have often underinvested in nonpersonal resources, some are now reversing course and ramping up investments, even deploying completely virtual teams in certain cases. This suggests they view the digital approach as having a similar impact to field-based MSLs.

Access is also a critical consideration. While medical affairs generally has enviable access to KOLs, and personal interactions are typically proactive and planned, the reality in the field can be quite different. The number of interactions planned versus interactions that actually happen often varies significantly. In the future, we expect more optimized communication and information access with digital orchestration, along with data-driven decision-making to improve patient outcomes.

This white paper is designed to provide answers and data points to help organizations start on their transformative journey. Specifically, it will address how organizations can:

- Redesign themselves
- Use the significant evidence we provide showing that nonpersonal channels drive impact, as measured by knowledge contributed and patients impacted
- Combine personal and nonpersonal channels to scale and personalize their medical interactions
- Increase patient impact significantly, while keeping organizational spend consistent by complementing personal with nonpersonal channels
- Segment their stakeholder universe in an industry-first manner to reinvent engagement strategies across the product life cycle
- Start to look beyond and acknowledge the growing relevance of transformative, nonpersonal avenues to become future-fit

On this journey, it’s important to take a step-by-step approach.

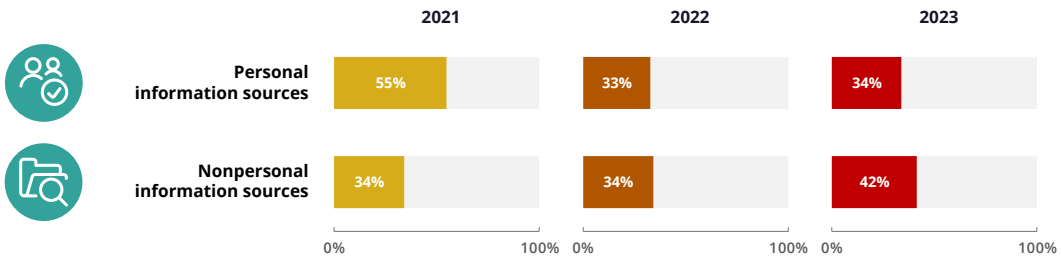
The nonpersonal wave in medical affairs: Define your impact

Organizations need to first define what impact means for them. Once this definition is established, they can take targeted steps to attain and measure that impact.

ZS's proprietary assessing source and channel impact (ASCI) analysis indicates over the years that there have been subtle shifts from KOLs globally toward digital and nonpersonal sources and away from personal. We've seen a decrease in preferences for personal sources and an increase in preferences for websites, online platforms, videos and medical literature to meet scientific information needs.

FIGURE 1

KOL preferences for information sources to meet their scientific needs



Engagements with different types of personal sources are declining

Our ASCI analysis for 2024 reveals that KOLs are embracing the shift to nonpersonal, as 83% of them say they are open to digital-only engagements with medical affairs in the absence of traditional interactions with field medical personnel in the future.

Additionally, while nonpersonal engagements have historically been viewed as far less impactful than personal, the trend is changing: 54% of the total knowledge gained by KOLs can be attributed to nonpersonal sources and is a predominant driver for KOLs' most impactful actions. For example, when KOLs share information through publications, conferences, presentations or clinical guidelines, they reach many other HCPs and, ultimately, patients. The network effect in such cases is exponential.

So, we can keep patient impact front and center as we define investments. But do KOLs think similarly?

As this shift to digital becomes more apparent and medical affairs teams innovate across their core capabilities, improved patient outcomes need to be at the core of the innovation, especially because they contribute to around one-third of the impact of KOLs' work—not to mention the impact they have on the medical community and disease state advancement. This ratifies our assumption from the KOL lens too. Notably, community physicians will increasingly gain prominence and be prioritized for engagement by most medical organizations. Getting this right will enable an even bigger impact on patients, as local and community KOLs treat roughly 50% more patients than national KOLs, and 35% more patients than international KOLs.

Once they understand the impact of personal and nonpersonal sources with the correct lens and frame of reference—knowledge contributed, and patients impacted—organizations need to identify the right areas of investment as they begin utilizing and scaling nonpersonal resources. More simply, they need to associate investments to their desired end impact. As previously mentioned, for medical affairs, impact should be defined as patient outcomes and the actions KOLs take after interactions (personal mediums) and engagements (nonpersonal mediums).

We recommend that organizations design their strategy by aligning their scientific vision for the year with the KOL actions that will support that vision. Next, they should assess how personal and nonpersonal mediums can effectively drive those actions and the resulting impact on patients. This mapping process will help ensure the right investments are made and determine the optimal mix between personal and nonpersonal mediums.

Medium-specific nuances also influence company advocacy and participant-specific actions. Activities such as serving on advisory boards, participating in investigator-sponsored trials or sharing information with peers are largely driven by personal-based channels. In contrast, broader knowledge dissemination actions—like utilizing information from insights in their own publications, conferences or presentations—are more driven by nonpersonal mediums. Organizations can vary their mix of personal and nonpersonal resources based on their desired outcomes.

This also means we need to consider changes to roles such as MSLs. Beyond traditional responsibilities such as scientific engagement, clinical trial support, congress support and internal activities, the MSLs of the future will also be required to:

- Share data and insights after congresses and publications at the speed of digital
- Utilize various digital channels for engagement and communication
- Initiate virtual customer collaborations and engagements with true expertise
- Undertake cross-therapy area (TA) training to address scientific requests using internal sources

In summary, patient impact can be the key indicator of choice, aligning with future industry expectations. With a clear understanding of impact, the next step is to define strategies that generate the greatest impact through both personal and nonpersonal mediums.

How do medical affairs organizations determine the right sources and channels?

Before we finalize investments in nonpersonal channels, it's important to determine the right amount of time to spend on sources and channels, so that we can maximize the actions taken by the KOLs and patients impacted. Driving medical effectiveness has always stemmed from quantity in the field—such as size, reach and frequency—while focusing on the quality of customer interactions is considered manual, time-consuming and driven by human judgment.

The industry defaults to recruiting more MSLs instead of identifying alternate mediums to generate the desired impact. Nonpersonal could be a viable option too, especially as it enables a similar level of impact as personal, but with lesser investment.

And for this next frontier to lift engagements from good to great, focusing on quality is imperative. For nonpersonal mediums, the first step to assess quality in a robust and scalable way is to look at key attributes like KOL preferences and the time spent across sources and channels of scientific information.

As a starting point, we should see preferences and time spent as individual metrics. However, these two metrics alone do not present a true picture, as organizations can often over index on the "high time spent and high preference" combination of these mediums. But there is a need to further analyze it using a cohesive impact indicator that signals whether using the sources and channels translates to knowledge gained and actual impact for KOLs. Hence, we underline the definition of impact upfront (as described in the section above).

For this purpose, ZS has developed proprietary medical affairs source and channel indices that assess impact based on several usage parameters:

- What are KOLs' preferences toward sources and channels for increasing their scientific knowledge?
- How much does a particular source of information contribute to their knowledge?
- How often do they leverage the sources of information and channels for engagement?

For the medical affairs source index (MASI), the highly effective sources have a score of greater than 0.15, the moderately effective sources have a score between 0.10 and 0.15, and the least effective sources are less than 0.10.

Scientific congresses rank highest with a score of 0.26, driven by their substantial impact per use (8.8). This reflects the wealth of knowledge gained and the diverse information-sharing and networking opportunities available in a single engagement. Professional society websites follow with a score of 0.14. Meanwhile, nonpharma videos, podcasts and medical information platforms rank lowest in impact, each scoring 0.05.

For the medical affairs channel index (MACI), the highly effective sources have a score greater than 0.14, the moderately effective sources have a score between 0.12 and 0.14 and the least effective sources are less than 0.12.

Email, online video meeting platforms, and live and interactive webinars emerge as the most effective channels via the MACI analysis, with scores of 0.15, 0.14 and 0.14, respectively. In addition to being convenient and timely, email facilitates easy sharing of downloadable presentations, reports and printed materials, which are the most preferred content formats for KOLs. Online video meeting platforms and webinars are preferred for their two-way engagement and immediate KOL feedback. This year, mobile applications have improved their MACI score by 30% compared to 2023, rising from 0.10 to 0.13. Text messages remain the least effective channel with a score of 0.08.

Is knowing this enough? The answer is no, as there are many complex factors at play. As the shift toward nonpersonal becomes increasingly prevalent and shapes the future of engagement, organizations must gain a deeper understanding of KOL preferences and consumption patterns. So, while indices certainly reveal the most effective sources and channels according to KOLs, we need to apply analytical rigor to also understand who spends how much time on which sources and channels, as we aim to drive impact for patients.

Why is this important? Every KOL universe has major, minor and micro segments—and preferences of the major segments tend to be overemphasized by typical data analysis. But as data is analyzed via other parameters and lenses, we see that micro segments can be highly impactful too and need to be engaged in a certain way.

Why are these preferences so important? Immunologists, cardiologists and neurologists all prefer disease state questions 1.5 times more than oncologists. Meanwhile, oncologists prefer clinical trials, results and data 1.6 times more than immunologists. The robustness of these numbers emphasizes why we need to get it right within the guardrails of end impact.

What happens if you get this wrong?

Extensive efforts toward the improper segment can result in a significant loss of impact. For instance, imagine ASCI data is extrapolated to a hypothetical universe of 1,000 KOLs for an organization and about 40% of them are spending time on sources and channels beyond the optimal range. This means each is taking three fewer actions and impacting 145 fewer patients than the KOLs in the optimal range. Overall, this translates to a potential loss of about 1,300 (6%) post-engagement actions and the opportunity to impact about 60,000 (38%) patients.

If this loss occurs at critical points in the product life cycle when KOLs want to start receiving information, it can pervade when the treatment is available, reducing adoption due to the KOL's loss of confidence. The link between knowledge and end impact on patients is critical, as seen in the 2024 Medical Affairs Outlook Report. We found that if a KOL is less likely to have confidence in the therapy or find the information relevant, they also have less time to integrate and adopt the therapy in their clinical practice.

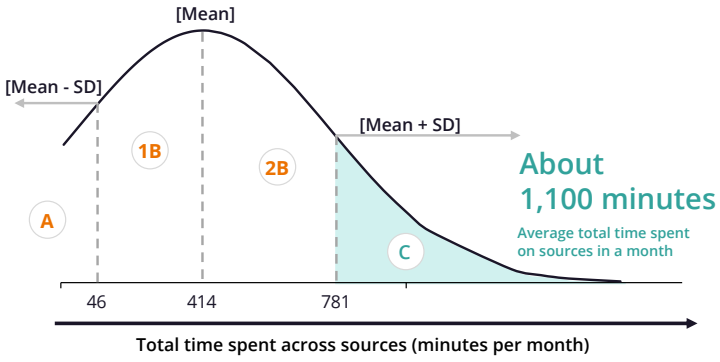
A detailed analysis of KOL preferences and time spent via multiple techniques shows that increased time, when analyzed in isolation, leads to the highest impact without diminishing returns. However, by assessing preferences alongside time spent, there is a point after which there is a decline in impact. This becomes the optimal segment for engagement. How does one define this limit in a manner that suits medical affairs? And most importantly, how does this vary across the major, minor and micro segments?

For starters, we should look at normal distribution curves of KOLs' total time spent on sources and channels (see Figure 2). The KOL group C for sources, while groups 2B and 2C for channels stand out as having the highest impact, indicating that KOLs who spend about 1,100 minutes per month on sources and about 730 minutes per month on channels have the highest impact.

FIGURE 2

Normalized distribution of KOLs according to time spent on sources and channels

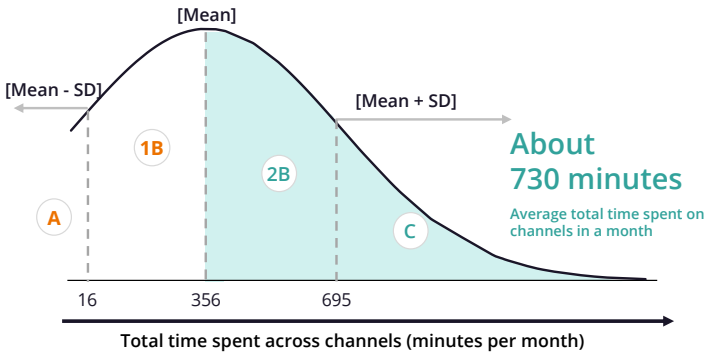
Based on how KOLs **spend their time** across different sources, the KOL group C stands out as having the **highest impact**



Normalized distribution of KOLs based on "Total time spent on sources"

Group	Actions taken	Patients impacted
A	11	7
1B	13	73
2B	18	48
C	**32**	**75**

Based on how KOLs **spend their time** across different channels, the KOL groups 2B and C stand out as having the **highest impact**



Normalized distribution of KOLs based on "Total time spent on channels"

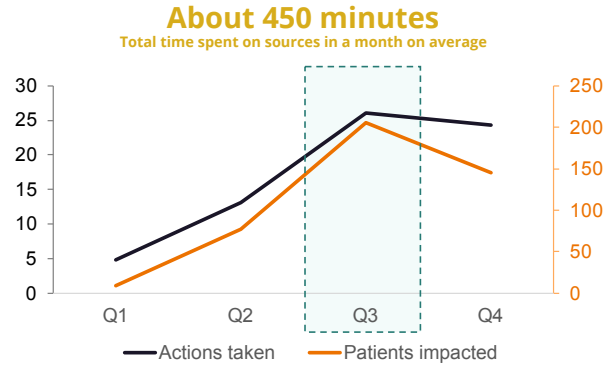
Group	Actions taken	Patients impacted
A	4	6
1B	16	74
2B	**29**	**114**
C	**20**	**100**

But we miss out on preferences in the above analysis. A more realistic picture is painted by combining preferences and time spent on various sources and channels. This analysis (Figure 3) shows that the most significant impact occurs in the third quartile (Q3), beyond which there is a clear decline in impact. This insight offers organizations an optimal solution, steering them away from unsustainable, ever-increasing investment. After this point it doesn't make sense for organizations to push information because it won't produce the most favorable outcomes.

FIGURE 3

A quartile segmentation of KOLs' time spent and preferences for sources and channels

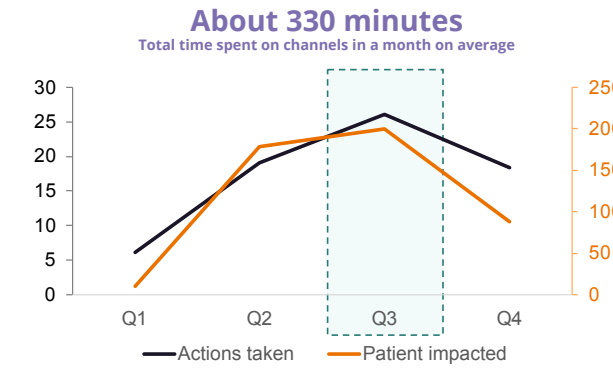
A quartile segmentation of respondents based on their total time spent across sources and preference rating revealed the third quartile to be the most impactful



Respondent quartiles based on "Total time spent on sources" multiplied by "Preference"

Quartile	Actions taken	Patients impacted
Q1	5	9
Q2	13	77
Q3	**26**	**205**
Q4	24	146

A **quartile segmentation** of respondents based on their total time spent across channels and preference rating revealed the third quartile to be the most impactful



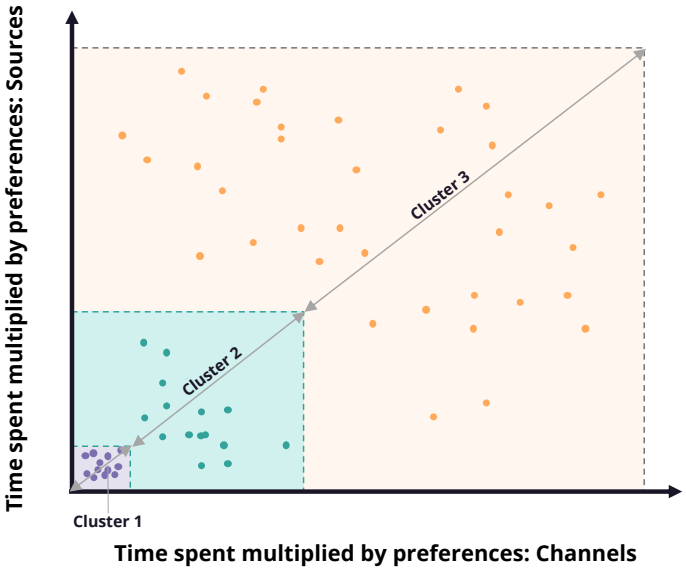
Respondent quartiles based on "Total time spent on channels" multiplied by "Preference"

Quartile	Actions taken	Patients impacted
Q1	6	11
Q2	19	179
Q3	**26**	**199**
Q4	18	88

Further, organizations can identify KOLs that fall in the optimal segment of Q3 and prioritize outreach efforts accordingly, ensuring personalized messaging through the right sources to drive the most impactful actions. The top sources of information for Q3 are medical literature and scientific congresses. The top channels of interaction are social media, on-demand webinars and email, which constitute around 50% of the time spent across all such avenues. As we can see, organizational investments can be optimized by focusing on identifying the right people and their consumption behavior. A more comprehensive understanding of segments can be achieved by clustering KOLs based on their preferences and time allocations for both sources and channels—beyond even looking at sources and channels separately.

FIGURE 4

Clusters of KOLs based on their preferences and time spent on sources and channels



Cluster	Average time spent (minutes)	
	Sources	Channels
1	113	82
2	**403**	**285**
3	908	706

Cluster	Actions taken	Patients impacted
1	6	17
2	**24**	**222**
3	21	77

In alignment with the quartile segmentation, the most impactful is cluster 2. Centrally positioned, it demonstrates there is a point after which more effort doesn't translate to higher impact.

Reviewing the characteristics and preferences of clusters to understand their consumption behavior and engagement affinity through nonpersonal efforts supports the argument for organizations to concentrate their efforts on cluster 2.

Cluster 1 exhibits lower time spent on nonpersonal avenues, as these KOLs favor more interactive, two-way scientific discussions, webinars and networking opportunities at congresses.

Cluster 2 often consumes information through medical literature and professional society websites and is interested in engaging with companies through publications, continuing medical education (CME) and ad boards.

Cluster 3 has a relatively lower affinity for scientific discussions with organizations and they consume product-oriented information independently through email and mobile applications.

Additionally, based on clustering and quartile analysis, the optimal monthly time spent for maximum actions and patient impact is 400-450 minutes for sources and 280-330 minutes for channels. Organizations should focus on this range by striving to understand KOL preferences instead of continually increasing investments with limited impact. While these numbers may vary based on an organization's specific KOL universe, benchmarking against these figures helps identify the current standing and needed improvements. Based on this analysis, we can identify the right stakeholder segments and focus our outreach on them, enabling us to personalize our messages.

How medical affairs can help KOLs improve decision-making

To begin, organizations need to understand how often KOLs cannot find the information they need and the associated exponential loss of impact on patient lives. According to our analysis:

- 57% of KOLs are unable to find the scientific information they need on a daily, weekly or monthly basis
- 24% are unable to find it only a few times a year
- 9% rarely or never have trouble finding the information they need

As previously established, knowledge and impact have a critical link, as we see that KOLs who have lower unmet educational needs take 29 actions on average, impacting 145 patients. On the other hand, KOLs with higher unmet educational needs only take 15 actions on average, impacting 92 patients. Again, scaling to a hypothetical universe of 1,000 KOLs for an organization, the estimated loss of impact of this unmet need could be about 10,000 post-engagement actions and 36,000 lost opportunities to impact patients.

Once information is lost, recovering it through educational efforts is costly and time-consuming, requiring investments in personal and nonpersonal at a much higher rate and pace. And losing information means more knowledge will be needed to take a similar number of actions. Intuitively, after a certain threshold, every additional action needs more knowledge. So, it would take significant effort and several years to regain a similar impact in the field.

Organizations won't be able to enable effective decision-making for their KOL universe without first ensuring their information needs are met at the right time. Organizations also need to look at their medical liaisons as robust delivery mechanisms for non-pharma sources—such as medical literature and government websites—in addition to deploying them as sources of information in the field, as KOLs believe being redirected to a third party via medical affairs liaisons helps enhance the reliability of the information. Said a national KOL: "If it is an alternative website supporting the product, it will be more credible because it will answer product questions in an unbiased manner."

Moreover, across different websites, KOLs say credibility is the most important factor that drives their usage, along with range of content and accessibility. Closing information gaps by engaging KOLs through their preferred sources and channels will build trust as an unbiased source, further encouraging KOLs to seek assistance from organizations to aid their decision-making.

Additionally, there are several digital activities that organizations can take to drive meaningful actions by KOLs:

- Hosting virtual educational events, such as webinars and congresses. KOLs often use insights from these events in their publications, conferences and guidelines, significantly impacting patients.
- Sharing digital content like articles, videos and brochures. KOLs utilize this content for speaking engagements, presentations and sharing information with formulary decision-makers.
- Developing continuous medical e-training programs, as KOLs engage with CME programs to enhance patient diagnosis and treatment, sharing knowledge with other HCPs to empower decision-making.

Looking toward the future, KOLs want to see organizations increase budget allocation for CMEs, speaker programs and clinical trials, followed by scientific discussions and scientific congresses. Organizations should extensively leverage congresses as a platform to discuss key products, research and disease area landscape updates with KOLs. Congresses have emerged as one of the most impactful paths of engagement with KOLs, and insights from medical affairs presentations can impact a huge number of patients.

Organizations can enhance their visibility in the competitive digital space by exploring these transformative mediums to foster connections with physicians, facilitate brand recall and initiate new conversations. To capitalize on these opportunities, companies should begin developing their digital capabilities now to minimize opportunity costs and improve efficiencies as the industry evolves.

It's worth noting that the ease of access to nonpersonal avenues, especially on the pharmaceutical side, encourage KOLs to utilize insights to take impactful actions for patients. On average, post-insight actions through nonpersonal mediums impact 57 patients, compared to 31 patients via personal mediums. Furthermore, pharmaceutical nonpersonal mediums impact 53 patients, while nonpharmaceutical mediums impact 46 patients.

But what do medical affairs' stakeholders value?

Once an organization has a firm handle on the right sources, channels and effort to be allocated and content to be created, it should align with what KOLs value and want.

Our analysis reveals that KOLs who are unable to find the information they need daily spend a significantly higher amount of time on average on both sources (26% higher) and channels (51% higher) of information, as compared to those who cannot find it weekly, monthly and so forth. While this finding is causal and intuitive, it provides an opportunity to improve information dissemination strategies so that KOLs spend less time looking for information and more time using the right information to impact patients.

In terms of topics, KOLs are most interested in obtaining information on real-world data, product questions, deep science and clinical trial results and data. Each topic also has a clear mapping of preferred sources, channels and formats—and in addition to TA nuances, these can differ by KOL segments.

For example, regarding formats, printed materials are most preferred for real-world data; bite-sized short-form text for product questions; and downloadable presentations, reports and papers are preferred for a deeper understanding of the science about the product.

Top choices for formats remain largely consistent across KOLs, but we did observe that a microsegment of KOLs have a higher preference for long-form and more detailed information. This microsegment also spends more time, on average, on sources and channels. Additionally, we see a link between this microsegment and a higher patient impact, as information consumed may be more comprehensive, thus leading to higher impact. For another microsegment, we see an overall higher preference for bite-sized, short-form text, as well as visual infographics.

Looking at the same microsegments, we find that 40% of the former KOL microsegment describes their treatment approach this way: "I explore all treatment options beyond guidelines and use my best judgment." This approach has the highest patient impact compared to those KOLs within the microsegment for who say, "Treatment is driven by existing standard of care or guidelines" or that they "Adopt newer treatments if I see the potential."

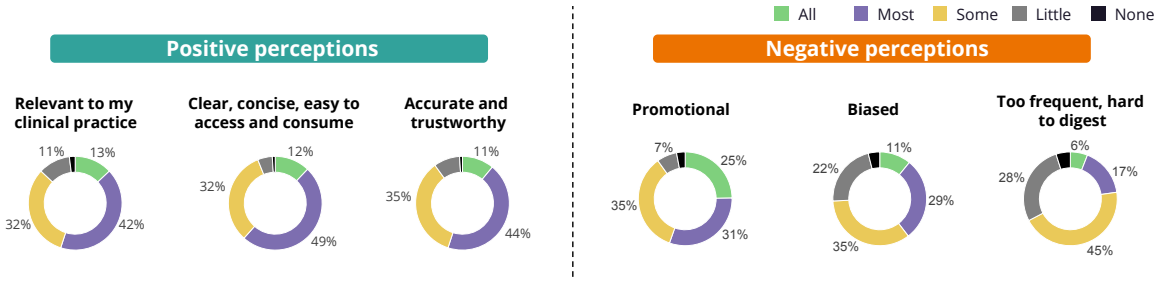
Similarly, for the latter microsegment we analyzed, 21% of KOLs for whom "Treatment is driven by existing standard of care or guidelines" has the highest impact on patients. Hence there are internal segment-level nuances to be considered as we design engagement strategies.

Is medical affairs ready for this shift?

Where does medical affairs stand today? KOLs feel that while most pharma content is accessible and credible, it is also perceived as promotional and biased, and KOLs say it could be more innovative and customized.

FIGURE 5

KOL perceptions of pharma content



In our survey, 87% of KOLs say medical affairs organizations have been extremely or moderately effective in using digital channels and technologies to provide them with relevant medical information. KOLs state rapid accessibility and availability as the primary reasons organizations' digital outreach efforts have been effective, in addition to comprehensibility and accuracy. Ineffective digital efforts, on the other hand, include biased, burdensome and unfocused information that isn't relevant to clinical practice.

Overall, KOLs want medical affairs content to be more detailed and readily accessible. For instance, if a KOL is looking up a pipeline product, through minimal clicks they should be able to find all information about its trials data, usage, deep science and more.

Some companies have done this well. A large pharma company we'll call Company A is considered best-in-class for its engagement via nonpersonal avenues. Company A stands out due to its strategic use of multiple coordinated channels and touch points, including webinars, online platforms and MSLs. It also ensures frequent delivery of up-to-date, dynamic information tailored to KOL needs, while maintaining a robust presence at congresses and a strong KOL network.

The average time spent by KOLs on sources and channels who have ranked these companies as best-in-class was benchmarked against the ZS optimal time spent analysis to understand bright spots and potential areas of opportunities. We found some very interesting results. For Company A, the mean time spent by KOLs in sources and channels was within the ZS benchmarks. Company A received positive feedback from our survey participants:

- "Appropriate frequency and length of communications"
- "Able to increase or decrease interactions with me as needed, diverse interactions, will refer within the company if someone is better suited"

For another top-tier organization, Company B, the time spent by KOLs in their sources and channels was significantly higher than our ZS benchmarks and averages. After digging deeper, what seemed like a source or channel issue actually revealed that a microsegment was spending excessive time on certain areas.

And for Company C, the time spent on sources aligned with our benchmarks, but the high time spent on channels time indicated a challenge to be addressed.

These three examples show a range of possible outcomes: there could be no problem, problems with both sources and channels, or a problem with either a source or channel. The best-in-class organizations excel at identifying problems and addressing them at the microsegment level—they dedicate more time to these specific issues rather than mistakenly treating them as broader segment challenges. That's why it's critical to understand KOLs with a granularity that helps analyze and solve for the root cause.

How do we figure out what's working and what's not?

To measure the effectiveness of outreach efforts by organizations, ZS recommends using mindshare as a critical metric. Mindshare can be defined as the level of awareness and perception that a single pharma company holds in a KOL's mind. It reflects how well a KOL would recognize and recall a particular company's therapy or disease area compared to competitors based on their communications, engagements and presence. Assessing mindshare shifts focus from activity metrics to evaluating impact based on patient outcomes driven by KOL actions.

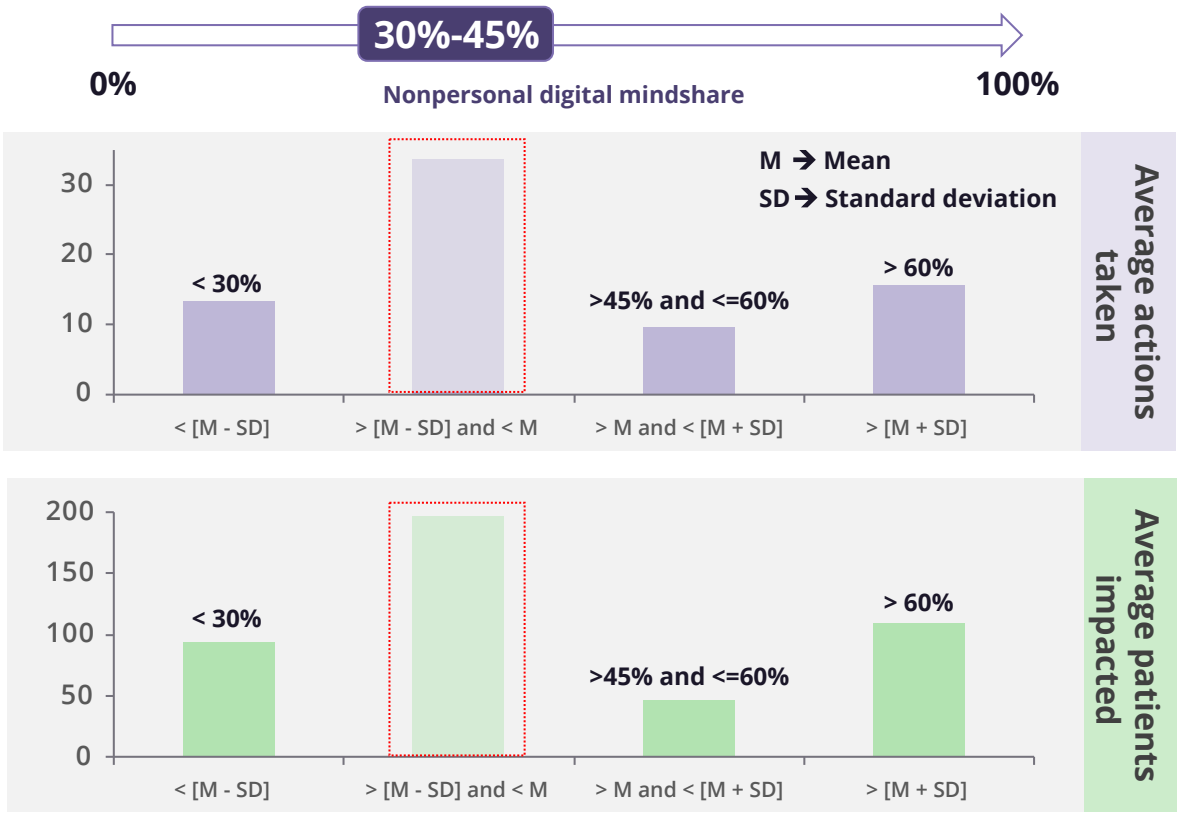
What's interesting is that the maximum mindshare that KOLs attribute to a manufacturer's medical affairs department is almost equally distributed across personal and nonpersonal communications, with 55% attributed to personal and 45% attributed to nonpersonal.

While personal interactions capture mindshare due to their personal touch, interactivity, responsiveness and collaboration, the importance of nonpersonal engagement is growing. KOLs are increasingly aware that changes are on the horizon, with more digital content being created and consumed.

Mindshare is a crucial metric because being top-of-mind for KOLs is essential to drive behaviors that lead to better outcomes for both the organization and patients. The 30%-45% segment of nonpersonal mindshare drives the highest impact in terms of actions taken and patients impacted—this indicates a need for organizations to make digital content more "sticky" and unique to enable a KOL to recall them over others.

FIGURE 6

Optimum nonpersonal or digital mindshare



For the top three manufacturers rated best in class by our KOL survey respondents, the nonpersonal mindshare is about 46% on average, leading KOLs to take roughly 14 actions after engagements, impacting about 109 patients. This elucidates the high impact of getting it right.

Digging deeper, we see that nonpersonal mindshare is driven by a fairly even distribution across several factors:

- 23% by manufacturer characteristics such as pipeline and research opportunities
- 21% by ease of access and visibility
- 20% by personalization of information
- 19% by intrinsic beliefs, values and ethics
- 17% by clinical decision-making traits, including approach to patient treatment and outcomes

This distribution remains largely consistent across KOL archetypes and preferences. However, among respondents who demonstrate the most practice-changing actions, there is a 5% shift in emphasis toward ease of access and clinical decision-making, with the importance of intrinsic belief drivers and personalization declining. This suggests that aligning clinical decision-making traits, treatment approaches and patient outcomes with KOLs is crucial for driving practice change and should serve as a guiding principle for medical affairs.

In summary, nonpersonal methods can effectively capture substantial mindshare and generate a significant impact—if thought about in the right way.

Enabling practice change in medical affairs

As previously mentioned, it's important to segment the existing KOL universe in a manner that helps organizations work toward practice change more efficiently. This segmentation can help organizations achieve goals faster, as they are able to cater to the needs of the different segments in an agile and personalized way.

KOLs define practice change in a number of different ways. Nearly two-thirds of KOLs define practice change as having a deep understanding of the TA and being involved with activities such as research, clinical trials, drug development and more. But 60% believe practice change revolves around participating in knowledge-sharing and networking events including congresses, speaker programs and advisory boards. And 55% of KOLs define it as adopting and advocating new and innovative treatments and therapies, which most closely align with ZS's definition of practice change.

Understanding the reasons behind these differences in definition is critical to drive outcomes and can be achieved by perceptively analyzing KOL behavior, which is often driven by their intrinsic motivations and beliefs—and it of course influences their decision-making for patients. Knowing this, we can align medical affairs efforts with the KOL decision-making process to impact patient outcomes, our ultimate objective. We understand that KOL decision-making is driven by:

- Gist: heuristics, cognitive biases and emotions
- Verbatim: knowledge, mental models and valuations

In simple terms, this results in KOLs making decisions either emotionally or rationally. So, we recommend looking at KOLs with active cognitive factors to gain a clearer and more holistic understanding of their choices and ways to improve them.

It's easy to assume KOLs and stakeholders are always rational, leading us to overlook the emotional perspective—but this can result in less-than-optimal strategies. We can solve this problem with a novel approach: using key decision-making drivers to define two industry-wide archetypes:

- Empathy-driven KOLs whose decision-making is driven by gist
- Evidence-driven KOLs whose decision-making is driven by verbatim

The interests, consumption patterns and subsequent actions of these archetypes will vary, potentially due to inherent biases and differences in how KOLs consume and process information to drive decisions. By recognizing these distinctions, organizations can effectively appeal to different aspects of individuals based on their fundamental choice drivers. For example, if we were to design segment-level strategies, we could use mindshare drivers such as:

- Manufacturer characteristics: pipeline, research opportunities, engagement avenues, responsiveness to queries and more
- Clinical decision-making traits: alignment with the KOL's approach to treatment, patient outcomes and more

There are twice the number of evidence-driven KOLs as empathy-driven KOLs, and evidence-driven KOLs allot a similar percentage to these mindshare drivers. Devising outreach accordingly can enable success in the field, because focusing just on mindshare driver percentages might suggest allocating similar efforts, but considering segment sizes allows tailoring strategies by driver and by segment for best results.

ZS conducted in-depth analysis to understand these two archetypes to ensure that we can plan engagements accordingly:

Empathy-driven KOLs are mostly driven by emotional connection and compassion for their patients. They are also considerate of their own personal identity, influence and reputation among their peers and rely on their knowledge and experiences to make decisions.

Evidence-driven KOLs are mostly driven by a desire to serve diverse and underserved patients. They want to stay updated on and leverage the latest advancements with adherence to guidelines. They are also mindful of the economic implications of treatment choices on patients.

Empathy-driven KOLs are interested in early pipeline scientific discussions and are keen to participate in interactive information exchanges across channels and forums, while evidence-driven KOLs are research- and outcomes-oriented, seeking trial results and answers to product questions.

As an example, a personalized engagement plan for reaching empathy-driven KOLs could include sharing real-world patient testimonials and case studies in an interactive and engaging manner that facilitates connection. It would also be effective to engage these KOLs earlier in the life cycle, as their influence is crucial for spreading information, and they aspire

to be who other KOLs look to for guidance. What does this look like in practice? Empathy-driven KOLs are more likely to advocate for a product by participating in publications, conferences and ad boards, and also to share information with formulary decision-makers and other HCPs. The right content provided at the right time can help effectively achieve organizational priorities.

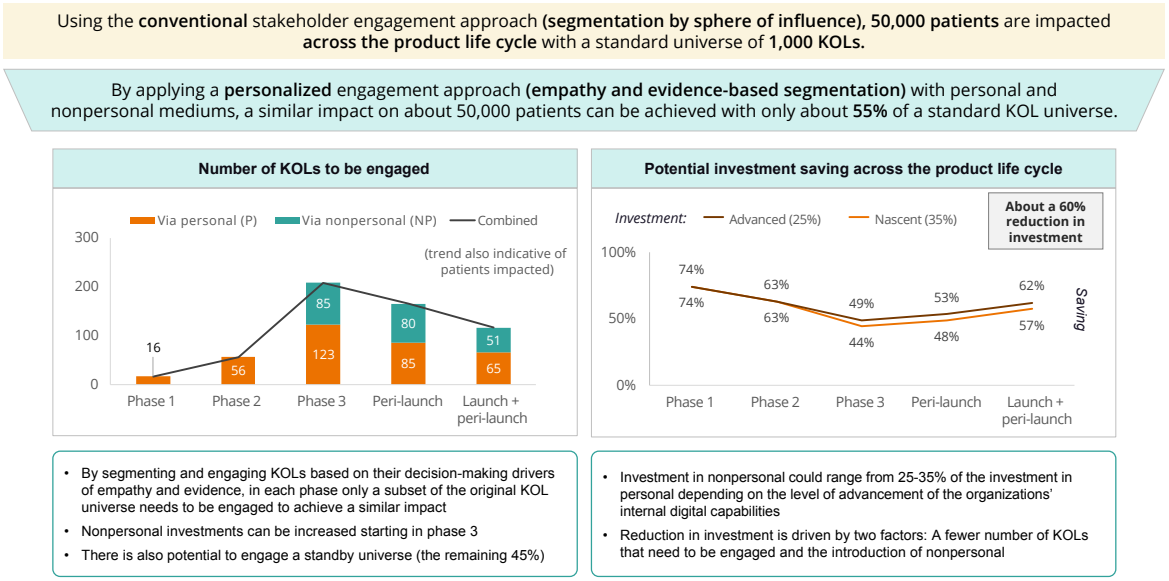
Balancing personal and nonpersonal approaches for maximum impact

Addressing when and how to reach these archetypes beyond traditional tiering throughout the product life cycle leads to better outcomes and drives cost savings. Determining when to start engagements with a certain archetype, and whether to engage them via personal or nonpersonal approaches, is key to maximizing patient impact, as each archetype has a different effect on patient outcomes with a certain archetype, and whether to engage them via personal or nonpersonal approaches, is key to maximizing patient impact, as each archetype has a different effect on patient outcomes.

FIGURE 7

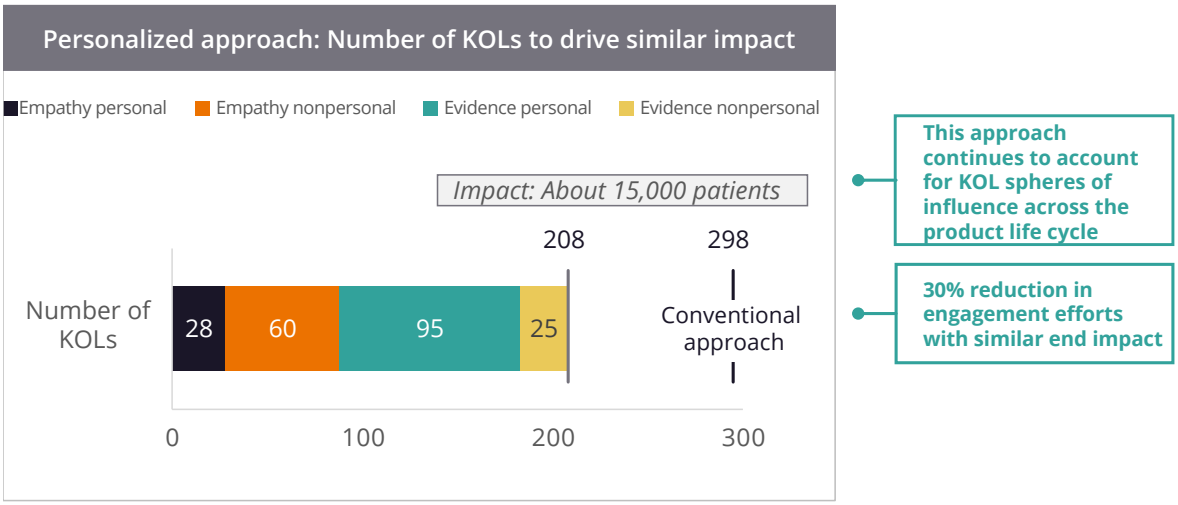
The benefits of a personalized engagement approach

Illustration



Further exploring phase 3:

Illustration



When we define our universe with a lens of evidence and empathy drivers, only 55% of the KOL universe needs to be engaged, and most importantly, this approach could lead to a 55%-60% reduction in investment as we deploy personal and nonpersonal sources.

There is a compelling case for increasing our focus on nonpersonal channels due to their high effectiveness and impactful reach through various mediums. However, this does not diminish the fact that MSL engagements remain the gold standard. It's important to also recognize that while individual nonpersonal efforts may have a lower impact, they require significantly less investment.

For instance, MSL engagements impact about 70 patients annually through insights and impressions, while prominent nonpersonal sources—such as medical literature, websites, videos and scientific congresses—impact about 40-55 patients. Investment in nonpersonal channels is typically 25%-35% of personal investments, and nonpersonal impact averages about 60% of the impact of personal efforts. Notably, non-personal investments in medical affairs would be somewhat higher than in commercial, as medical affairs content is more scientific data and evidence driven. Medical affairs could also produce a lower volume of content, with lower reuse potential—given the higher complexity and need for deep scientific knowledge and information—which limits efficiencies of scale.

All in all, nonpersonal mediums provide a balanced investment versus impact tradeoff, especially when optimal segments are identified, saving organizations from deploying extensive efforts that have a lower impact.

If there is a fixed investment pool driving a certain level of impact, the same impact can be achieved by adjusting the mix of investments between personal and nonpersonal mediums—ultimately leading to cost savings. Even if you maintain the original investment level while integrating nonpersonal as a complement to personal resources, your investment is more streamlined and has the potential to achieve an exponential impact.

To drive this shift forward, an outcomes-driven perspective needs to be at the center, where impact can be orchestrated through channels and sources such as email, mobile applications, webinars, platforms and more. They should also emphasize high-value avenues like CMEs and congresses. CMEs, which are the preferred engagement avenue for 53% of KOLs, significantly drive impactful actions and help position organizations as best-in-class compared to competitors. Similarly, congresses are about twice as effective as MSL engagements, as they reach a large number of patients and provide valuable networking opportunities for KOLs.

Further, with an evolving GTM model and a deluge of scientific information, the effectiveness of an organization's digital outreach efforts are crucial for capturing KOL mindshare and driving tangible practice change that benefits patients. When content is personalized and directed at the right KOL archetypes—by being aligned with their specific behaviors and perceptions—the impact can be amplified while reducing investment. Significant savings are possible if we understand our universe in a more granular way and most importantly deploy nonpersonal mediums alongside personal to broaden and scale the impact. Nonpersonal investments pay back many times over the years and a similar impact on patients is possible and achievable.

About the authors

Sunil John leads ZS's global medical affairs practice. He has authored several articles and provided perspectives on various medical affairs issues, including reinventing the go-to-market strategy for medical affairs, next-gen medical affairs and future customer engagement models. He has deep expertise in defining the value and impact of medical affairs, agile resource planning and deployments, productivity assessments and omnichannel. Sunil focuses exclusively on global medical affairs across strategy and advisory, field medical, medical excellence, medical information and medical education. Across emerging, midsize and large pharma companies, Sunil helps biotech and medtech clients with business strategy, launch planning, patient focused outcomes and organizational design. Sunil assists with outcome-based KPIs, frameworks for patient centricity, digital strategy visioning and planning. He also drives the use of tech, AI, medical insights and data to define and assess the future of medical affairs.

Rohan Fernando serves as the region managing principal for Americas – East at ZS. He is the founder and leader of ZS's strategic programs and deals group, which is instrumental in winning, designing and managing the company's largest and most strategic client programs. Rohan is also a member of ZS's shareholders council. Previously, Rohan led the global relationship with ZS's largest client, successfully expanding the partnership into new areas and establishing ZS as a true enterprise partner across commercial, R&D, supply chain, technology, consulting and analytics. Before this role, he headed ZS's business consulting and analytics division. Rohan brings significant international experience to his role. From 2012 to 2015, he was the region managing principal for Asia, based in New Delhi, where he oversaw the tripling of the India offices in size and impact. He also founded the Milan office in 2002 and later moved to London in 2006 to manage ZS's Europe business. Rohan has collaborated with over 50 pharmaceutical, medical technology and biotech companies, with engagements spanning more than 20 countries across three continents. He has published thought leadership on topics such as clinical analytics structures, sales force regionalization, the evolution of pharmaceutical commercial models and commercialization strategies in the medical technology industry.

About ZS

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