

# Rising Star: MEDICAL INFORMATION'S STRATEGIC TRANSFORMATION

CUSTOMER-CENTRICITY and BEYOND



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# Medical Information's StrategicTransformation

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#### **Executive** Summary

Life sciences companies are pursuing more cost-effective tools—such as digital channels or virtual agents—to help respond to increasing product and medical inquiries. In an era when regulatory approvals for new products are rapidly increasing and customers are feeling overwhelmed by new medical information, they are increasingly seeking immediate answers to specific questions. As a result, the need for high-quality, relevant, timely medical information is skyrocketing and the Medical Information function (MI) is rapidly evolving—or trying to—in terms of how the external service operates and its role internally.

With the sudden emergence and acceleration of large language model capabilities in Generative Artificial Intelligence (AI) in 2023, many in the industry are looking ahead at what may be possible. However, regulations are not keeping up with demand in many territories. (1) (2)

"MI professionals need to sense the "burning platform."... They need to be more proactive and assertive in demonstrating the value they can bring to an organization."

#### **Patrick Reilly**

Independent Consultant, Medical Affairs and Medical Information, US and Europe

Regarding improving MI's external service, as Medical Communications teams have raced ahead in using digital channels, MI remains largely reactive and restricted by privacy regulations and compliance firewalls. MI leaders need to challenge regulations in overly restrictive regions such as Europe and Asia-Pacific (APAC), where, in some countries, healthcare professionals (HCPs) can barely access product labeling through digital channels. Progress is being made in regions such as the US and Europe, where organizations are collaborating to deliver customer-centric MI services.

Notably, the "hidden gem" that is MI, with its highly knowledgeable team members and vast wealth of patient and HCP customer data, is being increasingly recognized for the wealth of strategic input that could be mined by AI and leveraged throughout the value chain.

## ABOUT this WHITE PAPER

**THIS WHITE PAPER TAPS** into the collective knowledge of 12 leading MI executives across the industry, including members of the Medical Affairs Professional Society working group on MI. This White Paper examines the following areas:

- ✓ The value that MI insights can bring to the organization throughout the product lifecycle by informing product strategy
- ✓ How the role of MI is evolving from an overlooked reactive "librarian and inquiry support" role to an empowered catalyst for innovation
- ✓ The digital transformation journey, including approaches, challenges, and successes
- ✓ Customer- and patient-centric omnichannel engagement capabilities
- ✓ Industry collaborations between organizations to help better navigate regulations, particularly in the digital space
- ✓ The ways in which MI service delivery varies across different countries and regions, with a particular focus on APAC
- ✓ The importance of demonstrating the strategic value that MI can offer to an organization, as it is not always obvious crossfunctionally
- ✓ How insights from MI fit together with insights from across the organization to give a holistic view of different stakeholders

#### Introduction



Pharmaceutical, biotech, and MedTech companies must provide non-promotional MI services to support HCPs and patients using their medicines or devices. MI activities involve the collection, handling, and dissemination of evidence-based, up-to-date, and scientifically balanced information on products, ensuring their safe and correct use. By doing so, the MI function plays a key role both internally and externally, adhering to strict regulations that mandate the provision of unbiased, scientifically accurate information upon request. MI professionals maintain auditable records of exchanges, ready for inspection at any time, making them invaluable in aiding informed decision-making by HCPs and patients. (1)

Externally, MI is one of the limited sources that can provide reliable, scientifically accurate, unbiased, and timely information on medicines or devices, making

the role especially important in situations in which there is risk of acquiring inaccurate or outdated information from third-party sources, which can lead to overall risk

#### **Customer Insights from MI Offer Significant Value**

In fulfilling its external function, MI collects rich insights into customer needs, which have the potential to be leveraged across the organization. Insights from MI, when combined with insights from Field Medical, Medical Communications, and Commercial, provide a holistic view of how a product is being received and may help inform product strategy. Moreover, in very early stages of the product lifecycle, prior to having an established field force in place, MI can be one of the few sources of reliable customer insights.

### UNDERSTANDING DIFFERENT STAKEHOLDER NEEDS USING INSIGHTS FROM ACROSS THE ORGANIZATION

#### FIELD MEDICAL

MSLs gather insights from KOL engagement across medical priorities including pipeline, clinical trials, education/advisory roles, evidence generation, launch strategy

#### COMMERCIAL

Commercial insights include sales driven activities through both in-field and digital marketing engagement



#### MEDICAL INFORMATION

MI channels provide insights on patients/carers, pharmacists and active prescribers seeking information "on the ground" during clinical practice.

#### MEDICAL COMMUNICATIONS

Medical Communications provides engagement insights across a range of channels including congresses, educational content and publications.

Stragetic insights are pulled from across the organization and combined during situational analyses to give a holistic understanding at different points across the product lifecycle.

Figure 1. How insights from across the organization can be combined to give a broader understanding of different stakeholders and needs. KOL, key opinion leader; MSL, Medical Science Liaison.

# Introduction (continued)



While Medical Science Liaisons (MSLs) primarily interact with key opinion leaders (KOLs) who specialize in certain areas and Commercial interacts with targeted KOLs, HCPs and payers, MI is able to represent concerns of grassroots HCPs, actively prescribing medications or using devices as part of their clinical practice; these include prescribers, pharmacists, and practitioner nurses as well as patients actively taking medications or using devices. MI also augments and supports Sales and Field Medical customer inquiries, resulting in a richer dataset. Importantly, MI inquiries are unprompted and reflect the immediate informational needs of those considering use of the products. This granular understanding of customers and patients enables MI teams to contribute significant value to stakeholders and the overall business. (5) (6)

#### **Broader Context**

MI fits under the Medical Affairs (MA) umbrella of life sciences organizations, working synergistically with various MA functions such as Medical Communications and Field Medical to ensure that the medical information needs of customers are being met for a company's products. In parallel, MI also supports Commercial functions such as field Sales Representatives and Marketing Managers for product-related HCP inquiries that fall outside the approved labeling, as Commercial teams are not permitted to discuss information that is not consistent with approved local prescribing information.

MI teams are composed of highly educated, analytical, and scientific minds. Team members typically possess health sciences or graduate degrees and extensive product portfolio or pipeline knowledge, are highly versed in regulatory and compliance risks, and are masters of navigating complex medical literature. (1) As MI is a customer-facing role, the skill set includes agile communication styles when responding to both HCPs and patients.

#### Historic Lack of Trust of MI and Underutilization Despite Being of High Quality

Historically, MI services have been underutilized by customers due to a lack of trust in the function. As MI is a service provided by a Commercial company that manufactures or provides a product, customers may avoid using this resource because of their distrust in the company or in the pharmaceutical and medical device industries as a whole. However, according to a 2021 survey of 500 clinicians, published in *The Journal for Nurse Practitioners* and supported by phactMI and Indegene, 60 to 70% of clinicians who received industry medical information gave it a quality rating of 4 or 5 on a 5-point scale for trustworthiness, conciseness, completeness, clarity, and relevance, and the majority (72%) used it to enhance patient education. (3)

#### **MI Channels are Hindered in a Digital World**

As HCPs show a growing preference and expectation for digital communication channels, the absence of a regulatory framework for non-promotional MI services presents a significant challenge, hindering the ability of companies to fulfill these needs effectively. Concurrently, for patients, the internet is flooded with a vast array of unregulated, readily accessible information from various sources, which may vary widely in quality and reliability. (4)



### PS Medical Affairs Professionals BY Medical Affairs Professional Society

# The Evolving Role of Medical Information

The environment within which MI operates is evolving. The pharmaceutical, biotech, and MedTech industries face increased cost pressures, rapid growth in the complexity of medical data, and shifts in HCPs preferred communication channels and content. These factors are driving organizations to seek insights and value from MI and look for more cost-effective MI operations. Many MI leaders generally agree that the true value of MI is greater than historically recognized. As MI evolves, the primary function as an external resource to HCPs and patients will remain. However, the opportunity to partner strategically internally has never been more apparent.

One global pharmaceutical company plans to host all data collected across all products and customer segments, including appropriate MI data, within a central repository, reflecting greater recognition of MI's value and increased strategic collaboration with other departments.

Another contributing factor to the rising recognition of MI as a strategic partner by other functions is the increasing difficulty faced by Commercial teams in engaging with HCPs through traditional channels, with many time-pressed HCPs preferring to access medical information within their workflow.

# Medical Information's Rise as a Strategic Partner

Thanks to advances in data-mining capabilities through AI, MI is in a unique position to unlock precious strategic guidance to functions across the organization via extraction of insights from customer interactions. MI is becoming a distinguishing factor for organizations that leverage it, especially when teams are prepared to exceed past expectations.

The valuable contributions that MI can provide to other internal functions include sharing insights early in the drug/device development process, generating innovative scientific content, supporting external engagement initiatives such as Patient Support Programs, assisting at scientific conference booths, and providing scientific training to various teams within the organization.

In some organizations, MI plays a central role in insights generation and managemen, already providing strategic insights to foster customer satisfaction and validate and inform product strategy. As AI and automated insights generation techniques advance, valuable insights are ripe to be mined.

# CONTRIBUTOR CORNER

"For a particular type of patient and product, it is as though we are at the patient's bedside with physicians, pharmacists, and nurses. MI professionals should engage in healthy debate, asking critical thinking questions to come up with the most optimal and feasible solutions—with AI as a copilot. Over the last 3 decades, the profession has evolved. We are not librarians. We are communicators of science."

Suzana Giffin, VP of Global Medical and Scientific Capabilities, Merck

"When you look at what HCPs want, Medical Information is always in there, as is Medical Affairs. We're finally at the table because the Commercial and Marketing teams are realizing they're not getting through to HCPs with the traditional sales and marketing channels. We can have a much more sophisticated and longer-form discussion that sales reps can't necessarily get anymore."

Michelle Bridenbaker, Global Lead Medical Information, Recordati Rare Diseases; Vice President, Medical Information Leaders in Europe (MILE)

"With the introduction of well-established global MI systems and the emphasis given to data intake integrity, Medical Information is often one of the few functions able to extract global customer insights in a seamless fashion. If MI were able to effectively introduce new technologies such as generative AI to insights evaluation, this could become an inflexion point in our pursuit to be seen as a true strategic partner."

Ainhoa del Romero, Head Global Medical Information, Takeda



# The Evolving Role of Medical Information (continued)



#### **Cross-Functional Collaborations have Increased Since the Pandemic**

Traditionally, MI has collaborated closely with functions like Safety and Quality, MA and Commercial to keep abreast of product developments and better understand customer needs and preferences for receiving medical information.

Since Al's meteoric rise over the past 18 months, MI has been collaborating closely with technology teams on digital projects to unlock the "hidden gems" within its vast databases and stretch its capabilities further. Additionally, functions from across the business, including Patient Advocacy, Market Access,

Commercial, and others, are keen to tap into and learn from MI insights to advance patient-centricity across the product lifecycle.

Furthermore, during the COVID-19 pandemic, Scientific Communications teams helped create new formats of MI content rapidly, enabling an agile response to changing demands. The function gained recognition by demonstrating agility in a crisis.

Finally, in some organizations, MI has been leveraging resources from and partnering with Commercial to pursue digital customer engagement strategies for MI in spite of budget limitations.

### CONTRIBUTOR CORNER

"Channels need to fit into busy lives. One physician might need to check data quickly by searching an MI website, then calls an MI hotline during lunch with a specific question and asks the MI agent to send an MSL to come and engage in a more in-depth conversation later that day."

Ainhoa del Romero, Head Global Medical Information, Takeda

"Customers want information in real time. They expect something concise without searching numerous places. Ideally, they would like to find it in their workflow. For HCPs, they would like to find it in the process of seeing a patient."

Stacey Fung, Global Medical Information, Gilead Sciences, Inc; President, Pharma Collaboration for Transparent Medical Information (PhactMI)

"Medical and Commercial channels need to be separate in certain areas from a compliance perspective. But, the overall customer experience needs to be seamless. If a customer has a medical question and they're coming to a MI website from the commercial website—can the two sides share the same login, for example? Otherwise, the customer experience is very fragmented."

Sudeep Mavila, Medical Information Cluster Lead, KANZ, Pfizer

"When you adopt technologies like Al, it's critical to work with different cross-functional teams to help you develop, implement, and maintain the solutions. Partnering closely with teams such as Technology, Data Science, Compliance, Legal, and Pharmacovigilance helps to ensure success."

Lee-Mei Pang, Associate Director Medical Information, Data and Insights, Asia Pacific Medical Affairs, Johnson & Johnson

"Within companies, we're seeing more cross-functional groups trying to hear the voice of patients. They've realized that MI is a hidden gem: a whole department with huge databases of patient questions and responses as well as customer sentiment and feedback on our products."

Karen Raines, Medical Information Lead JAPAC, Global Medical Information, Amgen

"Not only are we providing insights from patient and customer inquiries, MI also provides insights early on as part of a submission to regulatory bodies. Say you're filing for marketing authorization for an investigational product; we can provide insights on what the proposed label should look like, because we have insight into what a doctor would ask."

Abha Pandya, Associate Director Medical Information, Shionogi Inc.

# Shifting Expectations of Access to MI Services and Content

The demand for quick, efficient, and omnichannel access to MI has escalated. Customers increasingly expect efficiency when seeking MI, seeing organizations

as one whole rather than functional parts. Meeting these expectations by delivering information in preferred formats represents a significant challenge.

As organizations journey toward omnichannel engagement, MI channels should seamlessly integrate into this strategy, providing personalized experiences and access to MI on customers' preferred channels. Digital channels such as websites, chatbots, and virtual telephone agents have great potential to serve customers efficiently.



# Demonstrating **Value**

#### **Opportunity: Insights Generation**

Leveraging the data collected from incoming inquiries along with the responses provided translates into significant business insights and can be invaluable in evaluating current strategies. For example, a detailed analysis across customer interaction points can reveal varied queries emerging from MI call centers and channels that differ from those directed to Sales Representatives or MSLs.

MI queries reflect the immediate needs and concerns when using, administering, or prescribing the product and are unsolicited, offering unique insights into potential product efficacy/performance or safety areas that may have been overlooked in communication strategies. MI stands out as a distinctly unguided channel, highlighting the importance of analyzing these interactions to identify unaddressed topics that could benefit from further clarification to the external audience. Figure 2 shows how the organization can use various insights.

"MI professionals are increasingly in a position to help evaluate drugs already on the market and share their insights with the broader organization, both Commercial and R&D. Commercial organizations may leverage that information to enhance the commercial success. R&D organizations may use that information to provide strategic guidance early in the development of new treatments."

#### **Patrick Reilly**

Independent Consultant, Medical Affairs and Medical Information, US and Europe

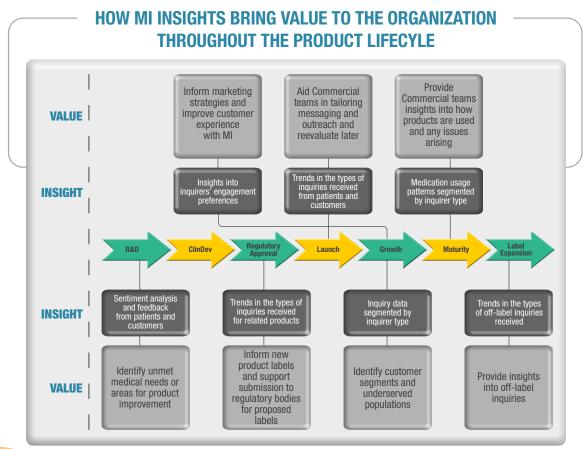


Figure 2. Insights generated from MI data and their value to the organization.



# Demonstrating Value (continued)

#### Demonstrating the Value of MI as a Strategic Partner

The value provided by MI must be proven on an ongoing basis to ensure optimal use of its capabilities, whether through creating and delivering content or analyzing engagement or customer insights. Interestingly, leaders within MI seem to be aware of a strategic paradox—the need to assertively prove value and the need to work synergistically as part of a continuum.

Many MI leaders are aware of these seemingly competing priorities, and perhaps the dynamic tension can drive the field forward by fostering innovation. But in a pragmatic world of tightening budgets and increasing cost concerns, is there a way for leaders to marry the two together? After all, despite varying regulatory and compliance issues, customer-facing functions present a unified organization to HCPs and customers. Where possible, integrating data collected by Sales Representatives, MSLs, and MI channels could significantly enhance information exchange and mutual support. This integration could allow functions to work in concert rather than in competition. As a result, communication could be streamlined and overall business strategy execution improved.

### CONTRIBUTOR CORNER

"It's human to believe that you're doing good things and want to shine. But let's think about what we can contribute towards something bigger, with the goal of making patients' lives better. Then we can work seamlessly together rather than competing. We must be where the customer is; this is the piece that we must resolve."

Jürgen Bentz, Global Head of Medical Information & Patient Support, UCB Pharma; Executive Committee Member, Medical Information Leaders in Europe (MILE)

"MI professionals need to sense the burning platform; to do something about it now versus waiting for that next opportunity. I can't emphasize this enough: If MI professionals want a future, if they want to continue to be relevant, they need to be more proactive and assertive in demonstrating the kind of value they can bring to an organization."

**Patrick Reilly,** Independent Consultant, Medical Affairs and Medical Information, US and Europe

... goal of making patients'
LIVES BETTER





# **Digitization** and **Technology**

Organizations vary greatly in their approach to MI digitization and the adoption of new technologies for many reasons, including cultural variations in preferred channels, limited resources available to implement and maintain digital tools or solutions, overly strict regulations unfit for the digital age, and compliance concerns. While much of the industry prioritizes digital innovation and "fail fast to learn fast" approaches, it frequently overlooks the importance of listening to customer needs during development.

#### **Al and Advanced Analytics**

Al and analytics technologies are already automating day-to-day tasks, reducing costs, and allowing more human focus to fulfill loftier, more strategic goals. Many organizations have been quick on the uptake of large language models, using them to efficiently analyze call transcripts and glean insights such as query content, which traditionally was done manually by a team member reading line-by-line and attempting to gauge trends, patterns, and hot topics.

Interoperability issues remain, as data are often siloed between functions and unable to be linked for more holistic insights or personalized customer engagement. Additionally, Al must be in sync with regulatory requirements surrounding privacy, compliance, and patient information, which makes connectivity with customers and patients challenging.

Al is providing efficiencies for routine MI activities like processing requests, searching for information, writing and translating, and generating reports. However, human expertise or a "human in the loop" is still needed to work alongside AI to ensure accuracy and quality, given the current issues surrounding AI hallucinations and misinformation that must be addressed.

#### **Innovative Tools and Approaches**

With the "million-dollar question" being whether Al bots can augment frontline call center agents for certain types of inquiries, the question has seemingly already found an answer: In certain instances, Al bots have proven effective. One such case is that of Amgen's voice-automated agent by Google, which triages incoming MI telephone calls effectively and answers 30 to 40% of MI inquiries on medication stability for a particular product (see case study on the following page for more details).

#### Other innovative tools and approaches witnessed:

- A pioneering global MI website has been launched by Takeda, which allows serving country-specific MI content while maintaining a single global interface, thus simplifying maintenance and streamlining site expansion.
- Chatbots are being used to engage customers, but vigilance is needed to ensure that responses align properly with approved MI content and are compliant.
- The COVID-19 pandemic highlighted the inherent ability of MI to adapt under pressure and be agile, forcing many organizations to implement new technologies and channels, some of which MI had been requesting for a long time. Many adopted new digital services that do not require in-person interactions, including customer triage options on the phone line, patient-focused websites, and virtual MI conference booths where HCPs could video call directly with an MI agent—particularly effective when travel was restricted.

"The biggest challenge is the rapidly evolving digital landscape and customer expectations for seamless omnichannel experiences. Customers want the same kind of frictionless access to medical information that they get from other industries, but we are constrained by regulations that haven't kept pace. This makes it hard to meet customer expectations around self-service and accessing information easily across digital channels. We need to modernize regulations to enable us to provide information more readily through the digital channels customers prefer, while still ensuring it is accurate, fair, and balanced."

**Stacey Soares** 

**Executive Director, Global Medical Information, Amgen** 



# Digitization and Technology (continued)

#### Digital Transformation Challenges and Evolving Solutions

Recent successes and excitement surround digitization, but significant barriers in many countries still lead to frustration. Despite this, solutions are being developed. (See Table 1 for top digital barriers and solutions.)

For example, there are no clear regulations in the digital space, yet technologies and customer expectations are rapidly evolving towards content that is easy to access and digest. Rules regarding digital channels and tools vary significantly in each marketplace due to pharmaceutical codes and regulations that are primarily based on historical commercial restrictions around HCP interactions.

In the US and Europe, the pharmaceutical industry has come together to collaborate in enabling digital transformation.

Currently, a Medical Information Leaders in Europe (MILE) task force is working on a "code for digital" for Europe to support member organizations' deployment of MI services. This follows the MILE 2023 launch of a framework of guiding principles to support pharmaceutical companies in delivering digital MI services. Endorsed by the top 3 European national MI associations, the framework remains open to amendments, and MILE seeks further input from stakeholders, including pharmaceutical companies, regulatory bodies, national industry associations, and HCP organizations. (4)

### CASE STUDY OF A VOICE-AUTOMATED AGENT

#### **Phase 1: Call-Steering**

In 2023, Amgen initiated a voice automated agent to triage incoming calls to the MI call center in the US. Currently, approximately 25% of the total call volume is redirected to other functions, as shown in the graph below.

With consistent quality control, the error rate of the virtual agent—where they were unable to determine the product or the intent of the caller—was lowered from approximately 20% to less than 15%.

According to Stacey Soares, Executive Director, Global Medical Information, Amgen, since deploying the virtual agent, human operator call times have "gone up" along with medical agents' job satisfaction, as they're no longer "playing phone operator" and simply redirecting 1 in 4 calls to other departments.

#### **Phase 2: Medical Information Responses**

A second use case for the voice-automated agent was implemented, with the agent giving well-defined MI responses.

Typically, a high volume of calls regarding medication stability and periods of non-refrigeration for a particular product are received. Currently, the virtual agent is capturing 30 to 40% of these calls. Of these, 30 to 40% require escalation to a live agent, and 30 to 45% are completed with results received from the virtual agent, as shown in the graph below.





Figure 3. Graphs showing virtual agent outcomes for call-steering (phase 1) and MI responses (phase 2).



# Digitization and Technology

(continued)

In the US, phactMI conducted a survey in 2021 asking HCPs who utilize MI services what format they prefer for their scientific response documents. The majority of respondents answered that web-based scientific response documents help them get to the answer more efficiently. In response, phactMI developed a method to convert MS Word documents to web-based

documents to be utilized on the phactMI Drug Information Database for member organizations. Additional evaluation is being conducted by phactMI on retrieval-augmented generation, which provides the ability to utilize AI to generate summaries from specified documents while avoiding plagiarism.

	TOP DIGITAL TRANSFORMATION CHALLENGES	EVOLVING SOLUTIONS
	Regulations haven't kept pace with the rapidly evolving digital landscape	Industry collaborative bodies are creating guidance on how to safely and compliantly use digital channels. Industry is petitioning regulatory bodies for guidance on digital channels.
	Firewalls are a significant barrier to HCPs searching for medical information online	Place MI materials in front of firewalls wherever legally possible.Industry to work with regulatory bodies to evolve regulations to better suit digital channels and content.
	HCPs have digital fatigue from signing up for multiple company portals	Industry works together to provide a single, central platform for access to company medical information eg. the phactMI drug information database in the US or the MILE platform migateway.eu in Europe.
	Al and automation introduce risks, including concerns about accuracy, safety, and regulatory compliance	Vigilant oversight and investment in technology to find or develop accurate, low-risk solutions.  Technology pilot schemes on a small scale allow accuracy, safety, and compliance to be assessed and enhanced before rolling out on a larger scale.
	Rapid advances in technology, such as Al and analytics, mean that there is a knowledge gap in MI teams between current and required digital skills	Invest in digital upskilling of current MI teams.  Consider how the role and responsibilities of MI have evolved to include a digital skill set and digital experience when hiring new team members.
	Digital solutions are expensive both in implementation and maintenance, and resources are limited	Technology pilot schemes on a small scale allow impact and value to be measured before rolling out on a larger scale.  Learnings from other internal departments or other external organizations provide valuable insights into key aspects of the solution, including challenges and expected impact.

Table 1. List of Barriers to digitization of Ml.



# Patient- and Customer-Centricity

#### **External MI Service**

Understanding patient and customer needs can be challenging but must be a priority for teams aiming to provide MI effectively. In countries where patients can access MI channels, MI teams should focus on representing the patient's voice and developing content that truly addresses patients' needs. The COVID-19 pandemic has increased the demand for instantaneous medical information from patients, but companies must be mindful of respecting the patient—prescriber relationship.

#### CONTRIBUTOR

#### **CORNER**

"Most people contacting MedInfo are using the product in question or are part of a healthcare team treating patients with the product. Their feedback on our products and services—direct or indirect—helps us evaluate whether we're focusing on the right things for our patients and customers."

Lee-Mei Pang, Associate Director Medical Information, Data and Insights, Asia Pacific Medical Affairs, Johnson & Johnson

"Customers are busy; we've brought everything we can in front of the password. In some markets, the regulations don't necessarily say that all things need to be behind a firewall, but we make it so."

Sudeep Mavila, Medical Information Cluster Lead, KANZ, Pfizer

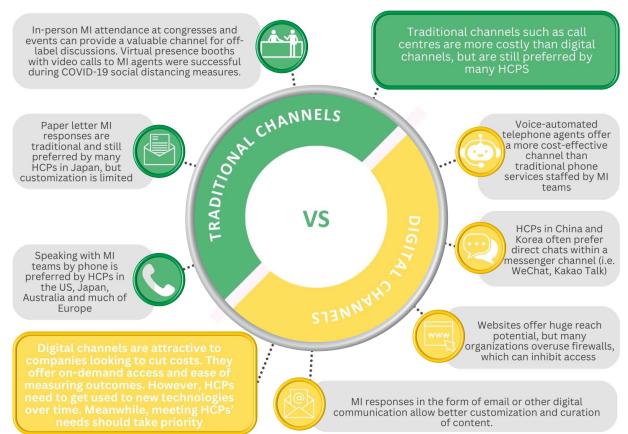


Figure 4. Traditional vs digital channels in terms of customer-centricity.



# Patient- and Customer-Centricity (continued)

One direct way to evaluate customer-centricity is through gauging customer satisfaction. This has traditionally taken the form of a short survey at the end of phone calls or via a follow-up email; however, response rates are relatively low. Companies need to think outside the box with their customer satisfaction measurement strategy, aiming to collect more efficient and real-time feedback, or even explore the use of digital tools.



Figure 5. How organizations are gauging customer satisfaction.

#### **Cross-Functional Strategizing and Evaluation**

MI teams are exclusively positioned to harness patient and customer feedback for the business and Commercial teams, allowing them to develop more patient- and customer-centric solutions and materials. Through leveraging customer insights, MI and the wider organization can:

- Evaluate whether current strategies (MI-led strategies and those led by other functions) meet patient and customer needs.
- Provide more personalized and tailored information during MI
   engagements, although connecting siloed insights across different
   functions back to a single customer is challenging.
- Collaborate cross-functionally across the product lifecycle, taking into consideration the voices of patients and customers.
- Better understand and address customer and patient needs relating to product or device development and refinement.

#### **Unified External Portal for MI**

Across the industry in the US and Europe, organizations have come together regionally to facilitate access to trusted medicine information and tackle some of the biggest challenges facing the field, such as a lack of clarity around how regulations apply to digital channels. Industry consortiums have launched single searchable databases for customers to find MI across numerous company product portfolios to make MI more accessible. The Pharma Collaboration for Transparent Medical Information (phactMI) in the US and MILE in Europe aim to reduce barriers to MI and overcome HCP digital fatigue caused by searching separate firewalled sites and using multiple logins. (7) (8) (9)

"In the US and Europe, they have an industry consortium approach with one website portal; that's something we should look at in the Asia Pacific region too. No one wants to remember 30 different logins and passwords."

Sudeep Mavila Medical Information Cluster Lead, KANZ, Pfizer



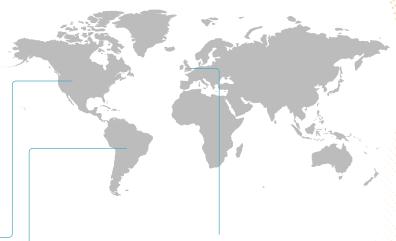
# Regional Perspectives

Globally, the MI function is vital in providing accurate and updated drug information to HCPs, patients, payers, and other interested parties. While some organizations are tackling MI services globally, for example, by providing a single global landing page for a website (which then allows users to select their location), most operate regionally or nationally due to the significant variation among local regulations. Generally, MI services worldwide are provided through a range of channels, including telephone support, mail, email, fax, digital platforms, and face-to-face interactions at medical conferences.

A distinctive aspect of United States MI compared to most other countries is the allowance for direct-to-consumer (DTC) advertising, which is heavily regulated to ensure only evidence-based, solicited information is shared. MI departments must be adept at handling inquiries generated from a broader audience than is typical in countries where DTC advertising is not permitted. Additionally, the US has specific regulations regarding off-label information communication, necessitating a careful balance between providing comprehensive drug/device information and adhering to legal constraints. This complex regulatory landscape demands that MI professionals in the US possess a high level of expertise and agility to navigate effectively.

**South America presents** a diverse regulatory environment, with each country having its own specific rules and guidelines for pharmaceutical practices, overseen by local regulatory bodies such as ANVISA in Brazil and INVIMA in Colombia. The region does not commonly practice DTC advertising of prescription medications, focusing instead on engaging HCPs as the primary medium for information distribution.

The lack of a unified regulatory framework across **South America** combined with varying degrees of access to digital technology across countries means that pharmaceutical companies must adapt their MI strategies. Companies need to ensure that channels both comply with the differing national regulations and are accessible widely.



**Europe has a diverse** regulatory landscape, with the European Medicines Agency (EMA) providing centralized approval processes alongside individual country-specific regulations. This necessitates a tailored approach to information dissemination across different European countries.

**Europe** has stringent restrictions on DTC advertising of prescription drugs, and although MI services are non-promotional, public-facing channels for seeking MI from the industry are not always permitted. This aims to maintain public reliance on HCPs as the primary information conduit to patients.

However, as a result, alternative sources of information—and in some cases misinformation—are sought and may be highly visible, which can lead to the propagation of scientifically inaccurate data spreading rapidly, while scientifically accurate data are systematically repressed by the very regulations intended to safeguard the public.

Globally, the MI function is WITAL

# Spotlight on **APAC**

When it comes to MI, APAC is a region of extreme differences. Developed countries like Japan, Korea, Australia, and Singapore have well-developed regulatory codes for defining how to operate MI services. A few countries, such as China and Korea, have even raced ahead with digital channels and are now at a point where HCPs request MI through the same established digital channels, such as WeChat or KakaoTalk, that are used for customer services across other industries.

However, in the vast majority of countries, the regulatory environment has either not been well defined, leading to a highly restrictive approach from industry and a vacuum of information, or not been kept up-to-date with the way patients and HCPs seek and consume information.

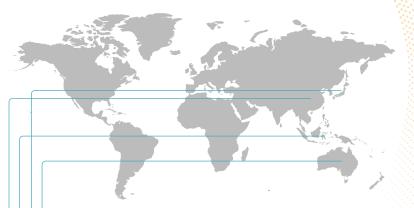
Even if the regulatory codes have evolved, companies often take a very conservative approach. The result is that patients and HCPs are locating information from other sources, many of which are not reputable. Modernization of codes and regulations is needed so that the industry can keep up with customer expectations for easy access to information.

China has embraced mainstream digital platforms—predominantly WeChat—for MI, education, and even patient follow-up. One survey of 1,636 WeChat users across 32 provinces found that 63% of respondents selected WeChat as their primary choice for accessing health education. Pharmaceutical companies are exploring diverse public-facing MI models in WeChat, including disease education and patient and HCP-oriented services related to their products and therapy areas. (10)

**In Indonesia**, like many developing countries in APAC, technology and internet accessibility varies between rural and developed areas, adding an extra layer of complexity to providing MI services and a barrier to HCPs accessing digital channels.

In Japan, physicians and pharmacists have a strong preference for requesting MI by telephone. Most physicians register to get MI updates from a domestic vendor, such as M3, CareNet, or Nikkei Medical, and there is also a tendency to prefer receiving paper MI response letters over emails or digital formats.

**Australian** MI services cater to HCPs and support patients with approved resources such as the CMI or MI-developed patient content. Display of excerpts in search results may be seen as promotional, and this precludes many MI digital sources from being indexed by popular search engines like Google. Coupled with the requirement for digital channels, such as websites, to be protected by verified HCP logins, this



greatly limits the discoverability and accessibility of MI digital channels, which hampers reach. Connection to MI via phone services is still a preference for the majority of customers.

In Australia there is room for improved local regulatory guidance on new technologies and digital engagement with customers via the Medicines Australia Code of Conduct. Currently, such guidance is limited; however, the code is under review and there is an opportunity for stakeholders to provide input.

### CONTRIBUTOR CORNER

"In many countries it's a patchwork of practices and poorly defined codes. I don't think we are supporting patients as effectively as we could be because we don't know what is allowed and what is not. So, we're just shutting the door."

Sudeep Mavila, Medical Information Cluster Lead, KANZ, Pfizer

"Across APAC we need to be bolder and faster in adopting digital solutions—China in particular has been great at doing this and we should follow their lead. This would help solve some common problems of limited resources, varying local customer expectations, and limited customer reach. We also need to help steer relevant industry policies and regulations so they can support us in providing digital services that match what customers are asking for."

Lee-Mei Pang, Associate Director Medical Information, Data and Insights, Asia Pacific Medical Affairs, Johnson & Johnson



# Futureproofing and Upskilling

#### The Evolving MI Skill Set

MI team members are highly trained scientists, often with a pharmacy or other health scientific background. They must possess a strong scientific and data-driven approach, coupled with effective communication skills and a knack for strategic, analytical thinking. As the role of MI evolves, so will the skill set required to perform it. This section aims to to assist leaders and learners seeking guidance on building or enhancing team capabilities and ensuring career resilience in this fast-changing landscape.

MI leaders agree that embracing technology is critical to future proofing the MI role. The evolving landscape demands a skill set that includes agility, data analytics, digital literacy, crossfunctional collaboration, and skills that enable working with rapidly advancing technologies, such as AI. These skills become increasingly important to be able to successfully enhance MI services to match customer preferences. In addition to a digital skill set, the pandemic has accentuated the need for agility, creativity, and adaptable communication skills to ensure a seamless customer experience.

#### Critical Skills Today that Will Remain or Grow in Importance

To deliver the external MI service, a crucial skill today is critically analyzing complex scientific information and distilling it into clear, concise summaries accessible to HCPs and patients. In the future, MI professionals will need to retain this skill and work in tandem with digital solutions such as virtual agents. MI professionals will be required to adapt continually as digital solutions evolve in their scientific capabilities.

Over time, the need for human responses to escalated queries that digital solutions cannot process are likely to be greatly reduced. In terms of advancing MI as a strategically valued internal partner, communication skills, confidence, assertiveness, proactiveness, and the ability to create healthy debate were identified by MI leaders as beneficial for propelling the function forward.

# SKILLS for TODAY

- Critical analysis of information: Ability to analyze scientific and complex information.
- Summarization skills: Ability to summarize information succinctly, making it digestible for HCPs and patients.
- ✓ Effective internal communication: Skill in articulating needs and sharing insights with internal teams such as Medical Affairs and Commercial to add value to the company.
- Knowledge of relevant regulations: Always being prepared for inspections and audits.
- Managing cross-country relationships: Skill in handling relationships and communications across different countries.

# SKILLS for TOMORROW

- ✓ Agility: Ability to adapt quickly and effectively and adopt a proactive mindset.
- Data analytics: Ability to analyze MI data to generate informative reports and insights as well as understand and navigate analytics technologies.
- ✓ Understanding and utilizing Al: Basic knowledge on how Al works, how to prompt Al to generate outputs such as response content or insight summaries, and how to compliantly incorporate Al into processes while considering its implications.
- ✓ Proficiency in digital tools and content: Skills in developing and using digital tools and channels and creating innovative and interactive content.



# Futureproofing and Upskilling (continued)

The capacity to leverage digital tools for extracting actionable insights from MI data will become progressively more vital for effectively communicating detailed information about products and services in a manner that resonates with diverse audiences.

Alongside technological adeptness, a thorough understanding of regulations and audit readiness will need to be maintained so that MI professionals are well equipped to navigate the legal and compliance parameters governing their activities.

#### CONTRIBUTOR

#### **CORNER**

"As analytics grows in importance and with more data being available, a lot of technical capabilities are going to be crucial. Any relevant IT skill sets that personnel have are also going to be a huge advantage."

Dhara Patel, Director of Medical Information, Siemens Healthineers

"I think an essential skill that Medical Information professionals should bring to the table is healthy debate and the ability to ask critical thinking questions. This mental muscle should be developed further."

Stacey Fung, Global Medical Information, Gilead Sciences, Inc; President, Pharma Collaboration for Transparent Medical Information (PhactMI)

"Really good internal collaboration and relationship skills are needed to break down the walls and build trust with functions like R&D to show the impact we can have and overcome barriers. MI professionals have got to speak to the value of the information that they have because it's not obvious to people within their own organization."

Patrick Reilly, Independent Consultant, Medical Affairs and Medical Information, US and Europe

"Will AI replace us? AI will help us to do our business better. Let us embark on developing the right tools and upskill our MI teams to manage them. MI teams must gain and complement their capabilities with IT skills, either by upskilling, hiring IT skilled personnel, partnering internally with skilled teams, or bringing in vendors."

Jürgen Bentz, Global Head of Medical Information & Patient Support, UCB Pharma; Executive Committee Member, Medical Information Leaders in Europe (MILE)

### EMBRACING TECHNOLOGY

is critical to future proofing the MI role



# The Next **5 Years**



#### **CONTRIBUTOR**

**CORNER** 

As we look to the horizon, the next 5 years for MI are not just about adaptation but about journeying towards greater impact, innovation, and collaboration.

Innovation and technologies such as AI and advanced analytics are set to transform the landscape, allowing MI to showcase untapped and underappreciated strategic value. The integration of technologies is set to revolutionize workflows, freeing MI professionals to concentrate on complex enquiries, generation and sharing of strategic insights and development of customercentric solutions. This shift will require human oversight on applied technologies to maintain accuracy, reliability and compliance.

Generative AI may present challenges as patients are anticipated to increasingly rely on it for medical information instead of trawling through online search results. The answers to patients' questions provided by some AI solutions may not be accurate or verified, and the sources from which they have been compiled may be cloaked. Yet patients may perceive them as useful and trustworthy.

There is an anticipated shift towards a more proactive MI function. Leveraging advanced data analytics, MI teams are expected to transcend traditional reactive models, identifying trends and proactively sharing invaluable insights to stakeholders. This proactive stance is not just a strategic shift but a reflection of the evolving expectations of the healthcare landscape.

Another significant ongoing trend is the digitization of the external MI service and the move towards omni-channel access. With an array of channels, including websites, chatbots, and collaborative medical portals, MI hopes to meet its customers' dynamic expectations—with guidance initially from industry collaborations with support from regulatory bodies in future.

Customer-centricity will ascend to new heights of importance. Gathering deep insights into customer preferences and personalizing services and products will become a cornerstone of MI operations. Understanding the voice of the customer will not just be a priority but a fundamental requirement for success. To achieve this, data integration between siloed customer data is essential. Although the resolution of siloed data has been an aim that has spanned over a decade, with increased investment and greater rewards promised from digital solutions, the next 5 years should see significant progress in this area.

#### Question

#### VISIONS OF THE FUTURE How do you see Med Info evolving over the next five years?

**A.** "We're going to be stronger, through collaboration. Instead of being loners, we'll see the strength in having a single Medical Information portal for multiple companies and make it easier for people to get to solid Medical Information. The customers will appreciate that because they'll see we've listened to them."

Michelle Bridenbaker, Global Lead Medical Information, Recordati Rare Diseases; Vice President, Medical Information Leaders in Europe (MILE)

**A.** "Generative AI could bring huge changes. In 5 years, the frontline of Medical Information could be entirely virtual, with a virtual agent answering questions from validated datasets. If compliance and accuracy of information issues are addressed, queries could then only be escalated to a Medical Information professional if the virtual agent is unable to provide an answer." Sudeep Mavila, Medical Information Cluster Lead, KANZ, Pfizer

**A.** "Digital services will become more personalized and customer-centric. Also, as we realize the value of data, data-driven insights can help us form a clearer picture of customer trends and needs and help shape our customer-centric strategies."

Lee-Mei Pang, Associate Director Medical Information, Data and Insights, Asia Pacific Medical Affairs, Johnson & Johnson

**A.** "We'll be more reliant on Al for basic functions like literature searching, triaging, and aggregating data. That will allow medical teams to focus on higher-value work, such as insight translation."

**Dhara Patel, Director of Medical Information, Siemens Healthineers** 

**A.** "My hope is that in the next 5 years the organization really understands that we're a strategic partner. We have a lot of insight and have a lot of perspective that can inform different stages of the lifecycle, including early development."

Abha Pandya, Associate Director Medical Information, Shionogi Inc.

**A.** "MI will have more of an active role engaging with patients. We'll be available on different platforms. Currently, we're striving for an omnichannel service as a function. Al technology will also really help us generate content faster—getting the right information to the customer in the format they want."

Stacey Fung, Global Medical Information, Gilead Sciences, Inc; President, Pharma Collaboration for Transparent Medical Information (PhactMI)



#### Key **Takeaways**

- MI is emerging as a strategic partner in many organizations—providing
  insights on the use of medications and devices by patients and HCPs and
  aiding organizations in directing their attention toward addressing customer
  needs across different stages of the product lifecycle.
- Aided by technological advances, such as generative AI, the changing role
  of MI from reactive to strategic partner is being accelerated by automated
  insights-generation techniques, which allow a wealth of valuable insights to
  be extracted and explored.
- It is essential to consider the voice of the customer and ensure customercentricity is top of mind when developing MI solutions. It is important to note that customers in many countries still prefer traditional phone services to access MI, with only a small group of countries, such as China and Korea, predominantly accessing MI through digital services, such as direct chat applications.

- MI digital solutions are on the rise amid significant challenges and concerns regarding accuracy, reliability, and compliance.
- Virtual MI call center agents are already being successfully deployed, thanks
  to advancements in AI. Headway in virtual solutions such as this is creating
  great excitement among MI leaders around the potential to reduce call
  center costs and gain operational efficiencies.
- Regulations to guide application of digital MI services are either currently limited or are too strict and lack adaptability to newer technologies. This is proving a challenge for MI teams wanting to adopt digital solutions. Industry collaborations in the US and Europe are helping to interpret existing digital regulations and provide more clarity.
- MI teams will need agile professionals that can adapt their skill sets quickly, utilizing data analytics, AI technologies and digital content tools.

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