A survey on the structure, organization, and functions of medical information departments in the pharmaceutical industry in Spain

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Abstract

The medical information (MI) function within the pharmaceutical industry plays a significant role in the provision of scientific answers for patients and healthcare professionals. The purpose of this study is to identify the current structure, organization, and functions of MI departments in Spain. Sixty local and international pharmaceutical companies based in Spain were invited to participate in this study between May and July 2019. An online 34–item questionnaire developed by the *AMIFE MI Working Group* was distributed to the companies. Data were analyzed through descriptive statistics using response frequencies. A total of 44 responses from 60 surveys (73%) were received. More than half of the respondents were employed in international companies based in Europe (57%, *n* = 25). Seventy-one percent (*n* = 31) of the companies had 100 to 1,000 employees in Spain. Most respondents declared that they had an MI department in their company (73%, *n* = 32), with most (53%) having two to five employees working on MI. Most MI (*n* = 50) specialists had a biomedical academic degree (predominantly pharmacy, biology, and medicine). MI departments were involved in many functions, the most common being answering enquiries (100%), handling drug information requests (97%), preparing written responses (94%), and literature services for external use (77%). The mean annual volume of MI enquiries was 2,301 (median 1,100). The results of this survey contribute to a better understanding of MI departments in Spanish pharmaceutical companies, as well as their functions and responsibilities, and could help identify opportunities and areas for improvement.

Keywords

Medical information; Health information; Health; Medicine; Scientific information; Survey; Pharmaceutical industry; Drugs; Scientific documentation services; Drug information services; Medical information departments; Healthcare professionals; Patients; Spain.
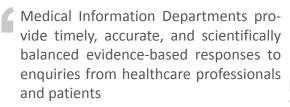
1. Introduction

Legislation requires that pharmaceutical companies provide a scientific service to answer customer questions about their medicinal products placed on the market (*The European Parliament and the Council of the European Union*, 2001).

Healthcare professionals (HCPs) who have recently used or are planning to use a specific pharmaceutical product may require extensive information about its effectiveness and safety profile. Once HCPs and patients gain experience in the use of a product, their questions become more complex and related to clinical situations. The answers provided must be based on up-to-date, scientific, nonpromotional information. Medical information (MI) departments aid evidence-based decision-making and contribute to increasing the knowledge of HCPs and patients on the safe use of medicines. The principle of MI is to provide timely, accurate, and scientifically balanced evidence-based responses (**Soares**; **Marsh**, 2008) to unsolicited questions from customers (patients, physicians, nurses, pharmacists, payers, etc.).

> Medical Information Departments provide timely, accurate, and scientifically balanced evidence-based responses to enquiries from healthcare professionals and patients

Although their key role is to provide product information to HCPs and patients, MI departments are usually multifunctional and responsible for a large number of tasks (**Werner**; **Poe**; **Graham**, 2000; **Stonier**, 2003; **Bordoloi** *et al.*, 2014; **Ogbru**, 2014, **Wormleighton**; **Leighton**, 2009) such as the revision and approval of promotional materials, the identification of key publications about products and associated pathologies, training, writing medical papers, support for medical meetings, etc. (**Leighton**; **Davies**, 2009; **Wu**; **Smith-Schmelz**; **Doshi**, 2013). MI services use a variety of channels to interact with users. Telephone and email are most preferred by patients, pharmacists, and physicians, but congress booths, chats, webs, apps, social media, etc. are becoming increasingly popular.

In 2004, a group of MI professionals supported by the *Spanish Pharmaceutical Industry Association* (*AEFI* for its acronym in Spanish), surveyed 20 MI departments to understand the structure and functions of this role in Spain (**Tabuenca-Cortés** *et al.*, 2004). In 2015, professionals from the *Medical Association of the Spanish Pharmaceutical Industry* (*AMIFE*, for its acronym in Spanish) fielded a 29-item survey with the aim of determining the structure and function of MI in pharmaceutical companies based in Spain (**Flores** *et al.*, 2015; **Guardiola** *et al.*, 2016). This 2015 survey resulted in methodological issues and is to be considered an initial draft of the current *AMIFE* survey. Neither the *AEFI* nor *AMIFE* surveys have generated journal articles; full results were never published. In 2009, a European publication (**Leighton**; **Davies**; 2009) including data from a very small number of pharmaceutical companies in Spain presented aggregated results, which were thus not specific to Spain.

It is of interest to have up-to-date and detailed information on the structure, organization, and functions of MI departments. Determining the current status will enable us to analyze how the function and structure have evolved, and to identify areas of opportunity to improve customer service and career development.

> ❛ Most surveyed companies offer online content or services ❜

2. Materials and methods

Local and international pharmaceutical companies based in Spain were invited to participate in this observational, cross-sectional survey from May to July 2019. Searches of professional organizations, private institutions, catalogues, and databases did not identify a comprehensive registry of Spanish MI contacts. We used the *AMIFE* members database, which identified MI professionals from 90 companies. We contacted these 90 *AMIFE* members individually by email or telephone to confirm that they were still MI personnel at the time of the survey. Sixty confirmed they were involved in MI tasks, or provided a MI contact; the rest did not reply.

An online, anonymous, voluntary questionnaire developed by the *AMIFE MI Working Group* was sent, via email using the *SurveyMonkey P®P* tool, to the targeted participants, i.e., 60 MI contacts from 60 pharmaceutical companies.

The survey consisted of a 34-item questionnaire aimed at understanding the organization, structure, and functions of MI departments. Participants were permitted to skip questions if not pertinent to their organization. Questions were focused on five key areas: company characteristics, professional role, tasks/activities within MI, structure/organization of MI departments, and metrics and tools.

For the purposes of this survey, the MI department was defined as the area or department of a pharmaceutical company responsible (although not necessarily exclusively) for responding to unsolicited questions about its products (and issues directly related to them) from healthcare professionals or patients. A MI specialist was defined as a professional having prime responsibility for providing such responses. In addition, MI personnel referred to anyone working in the MI department, doing technical, administrative, and/or support tasks.

Data were collected electronically and analyzed through descriptive statistics using response frequencies for all items of the questionnaire.

3. Results

3.1. Company characteristics

A total of 44 responses from 60 surveys were received (73%), representing 44 different companies. The majority of the respondents worked in biopharmaceutical (89%, *n* = 39) and in international (89%, *n* = 39) companies, almost half of which had headquarters based in Europe (48%). The global company size ranged from fewer than 1,000 employees (7%, *n* = 3) to more than 50,000 (19%, *n* = 8). Most of the national or multinational companies that participated in the study had 100 to 1,000 employees in Spain. The characteristics of the companies are summarized in Table 1.

Table 1. Characteristics of pharmaceutical companies based in Spain that participated in the survey on MI departments (*n* = 44)

Characteristic	n	%
Type of company		
Biopharmaceutical	39	88.6
Biotechnology	5	11.4
Other	0	0
Geographical scope		
National (operates only in Spain)	5	11.4
International:		
Based in Spain	4	9.1
Based in Europe (except Spain)	21	47.7
Based outside Europe	14	31.8
Number of employees in the company (globally)		
<1,000	3	7.1
1,000–10,000	17	40.5
10,001–25,000	6	14.3
25,001–50,000	8	19.0
>50,000	8	19.0
Number of employees of the company in Spain		
<100	4	9.1
100–1,000	31	70.5
>1,000	9	20.4
Is there an MI service/department in Spain?		
Yes	32	72.7
Yes, but service fully externalized	3	6.8
No:	9	20.5
Department/role that assumes MI tasks*		
Medical affairs/MSLs/scientific advisors	6	
Medical director	4	
Pharmacovigilance	2	
Quality control	1	
Consumer services	1	
Regulatory affairs	1	
Marketing/market access/clinical operations	0	
None	0	

*More than one answer allowed

3.2. Medical information tasks and activities

The surveyed MI departments were responsible for a wide range of activities. The most common tasks included handling requests for information on pharmaceutical products (frequent or basic questions 97% (*n* = 29), complex questions 100% (*n* = 30), descriptive statistics from response frequencies), answers to scientific questions on drugs (97%), preparation of written responses (93%), literature service (77%), provision of therapeutic area information, and legislation/copyright support (70% for both).

When asked about the preparation of written responses, 33% (11 of 33 respondents) indicated that standard responses or frequently asked questions (FAQs) were prepared globally, while 18% were prepared locally and 45% used a mixed responsibility model.

The activities of the MI departments are presented in Table 2.

Table 2. Tasks and activities of MI departments in pharmaceutical companies in Spain (*n* = 30)

Task / activity	n	%
Response to basic enquiries (SmPC*, patient leaflets, FAQs)	29	96.7
Response to complex enquiries	30	100
Therapeutic area updates	14	46.7
Product updates	16	53.3
Market access support	17	56.7
Filing and documentation	13	43.3
Therapeutic area/complete business unit	10	33.3
Customer service telephone center (answering telephone enquiries)	16	53.3
Coordination of activities in the region or with central headquarters (liaison or contact work in the affiliate)	11	36.7
Preparation of written responses	28	93.3
Evaluation of information resources	12	40.0
Training on information search techniques	10	33.3
Internal product training (e.g., training of sales network)	8	26.7
Library, subscription, and bibliography management for internal use	10	33.3
Management of subscriptions and other third-party services	2	6.7
Therapeutic area information	21	70.0
Legislation (copyright, etc.)	21	70.0
Participation in product or therapeutic area strategies	7	23.3
Presence on congress stands	8	26.7
Responsibility for web pages	10	33.3
Response to enquiries on scientific information on drugs	29	96.7
Review and/or approval of promotional materials	15	50.0
External user bibliography service (articles and searches)	23	76.7
Support for company publications (medical writing, edition, etc.)	13	43.3
Translation	3	10.0
Other	1	3.3

*Summary of product characteristics

3.3. Structure and organization of MI departments

Most respondents confirmed having a MI department in their company in Spain (73%, *n* = 32), which in 40% (*n* = 12) of cases was established over 10 years ago and in 33% less than 5 years ago. In pharmaceutical companies with no MI department (20%, *n* = 9), MI tasks were carried out by various functions, the most frequent being medical affairs (*n* = 6), medical director (*n* = 4), or pharmacovigilance (*n* = 2).
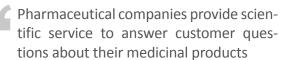
A high proportion (83%, *n* = 25) of survey respondents indicated that MI departments reported to the medical organization. The majority of MI specialists reported either to a MI manager/supervisor (40%) or to the medical director (27%); other reporting lines included medical advisor, regulatory affairs, scientific area, or medical affairs operations.

> Medical Information Departments aid evidence-based decision-making and contribute to increasing healthcare professionals and patient knowledge on the safe use of medicines

Regarding outsourcing, three companies declared that their MI service was totally externalized under the responsibility of the medical director, pharmacovigilance, or customer services. Nearly half of companies (47%, *n* = 15) answered that the service was partially externalized. The services that were most frequently outsourced were handling frequent customer questions on pharmaceutical products, literature services, or first-line call centers.

> Pharmaceutical companies provide scientific service to answer customer questions about their medicinal products

The alignment of MI specialist teams was also queried. Most respondents (61%) stated that MI teams were organized by therapeutic area/business unit (47%, *n* = 14) or product (14%, *n* = 4), while 37% (*n* = 11) of respondents reported that the MI specialists were responsible for all tasks within the department, covering all products regardless of therapeutic area.

The total number of MI specialists employed varied across the companies. Respondents (*n* = 30) reported MI departments with one employee in 40% of companies, while 7% had MI departments with ≥5 employees and most companies (53%) had between 2 and 5 employees.

Employees of MI departments were office based in 23% (*n* = 7) of companies, while 70% (*n* = 21) reported they could work from home as well as from the office.

3.4. MI role

Participants were asked about their companies' education and training requirements for the MI role (multiple answer model). The most frequent requirement to work as a MI specialist was to hold a biomedical degree such as pharmacy (93%), biology (83%), or medicine (80%), while 6% of survey respondents indicated that their companies required MI professionals to be specific specialists. These requirements align with the current situation in which 86% of MI employees have a biomedical university degree. Companies participating in the study employed also other professionals with varied academic backgrounds (i.e., 7% with an information sciences degree and 5% with a non-life-sciences degree).

Forty-three percent of respondents (*n* = 13) confirmed that they had a specific training program in place for the MI role. Eighteen companies provided details on the training topics, which included product/pathology (83%), literature searches (72%), pharmacovigilance (67%), and information technology (IT) tools (56%).

When asked about uncovered training needs, respondents mentioned medical writing, legislation, biomedical information sources, critical reading, and communication skills (Table 3).

Most respondents (90%, *n* = 27) stated that their companies had a job description for MI specialists. With respect to career opportunities, 50% (*n* = 15) declared that they had a promotion path within their technical role.

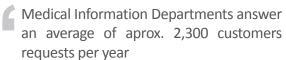Table 3. Training areas covered and training needs in MI

Training courses/topics	Included in MI training *n* = 18		Training needs *n* = 30	
	n	%	*n*	%
IT tools	10	55.6	19	63.3
Literature searches	13	72.2	24	80.0
Medical writing	4	22.2	25	83.3
Biomedical statistics	3	16.7	17	56.7
Pharmacovigilance	12	66.7	20	66.7
Biomedical information sources	9	50.0	24	80.0
Critical reading	7	38.9	24	80.0
Legislation	7	38.9	24	80.0
Disease/therapeutic area/product	15	83.3	26	86.7
Communication skills with customers	4	22.2	21	70.0
Social media and digital channels	5	27.8	14	46.7

3.5. Metrics, performance indicators, and tools

From a total of 32 respondents, most indicated that their MI departments used performance metrics (78%, *n* = 25) such as the number of enquiries received (88%) and the response time (96%). Other performance measures included customer type (72%), therapeutic area (88%), and type of enquiry (84%).

The response time performance indicator varied depending on the type of enquiry: For bibliographic requests, 43% of companies had an established response time ≥5 days and 36% a response time ≤3 days, while the others (21%) had

not established a performance objective. Basic medical enquiries (answered with SmPCs, package inserts, or standard response documents) had to be answered in ≤3 days in 64% (*n* = 18) of cases, while complex enquiries had a stated response time of ≥4 days in 79% (*n* = 22) of companies.

> ' Medical Information Departments answer an average of aprox. 2,300 customers requests per year '

The total number of medical information enquiries received in 2018 (27 responses) varied widely from company to company and ranged from 8 to 14,140, with an average of 2,301 and median of 1,100.

Regarding the methods used to evaluate the MI services, audits (47%) were the most frequently used, followed by customer satisfaction surveys (37%).

Among the channels used for MI enquiries, email (100%, *n* = 32) and telephone calls (87%, *n* = 28) were the most widely used, followed by websites (56%), personal contact (31%), and postal mail (28%). Apps and social media were used by 19% of companies, while fax and chats were less commonly used (12% and 6%, respectively).

When asked about specific tools for managing standard content (medical letters, FAQs, etc.), 24 out of 33 respondents (72%) confirmed that they used specific software; 70% used a global system, while 3% used a local one, and 27% of companies did not use any tools.

Finally, when asked about new technologies or services for MI management (26 responses), two new channels stand out: websites with contact information (92%, *n* = 24) and websites with scientific content (46%, *n* = 12). Other options (such as *Twitter*, *Facebook*, chats, chatbots, or *Instagram*) were sparsely represented.
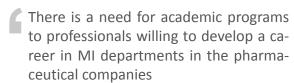
4. Discussion

The aim of this study is to provide knowledge on MI departments in the pharmaceutical industry in Spain. Both large and small size companies, national and international, are represented. Some items reveal important differences among companies, although the core of the function is common.

Overall, the results of this survey demonstrate a broad diversification of functions in MI departments, consistent with previous reports (**Bordoloi** *et al.*, 2014; **Ogbru**, 2014; **Robson** *et al.*, 1996; **Roberts**, 2000; **Robson**; **Robson**, 2000; **Bonk** *et al.*, 2012; *Best Practices*; *LLC's Research*; *Advisory Services*, 2018; **Marasigan**; **Doshi**; **Fung**, 2020; **Patel** *et al.*, 2020). A variety of tasks was also described by **Tabuenca-Cortés** *et al*. (2004), although some activities such as customer call center responses, preparation of written responses, and answers to complex enquiries were less frequent at that time. New tasks are also revealed, such as congress booths, market access support, medical writing, product updates, product training, and participation in product or therapeutic area strategies, together with others related to technology, such as responsibility for web pages. The number of specialists in MI departments varies, although 53% of the reported values ranged between 2 and 5. This seems not to have changed in the last 15 years in comparison with the 2004 Spanish survey (**Tabuenca-Cortés** *et al*., 2004) and 2009 European survey (**Leighton**; **Davies**, 2009). However, we also observed a high reported percentage of departments with only one dedicated person (40%). Although activities are different than in the past, MI continues to be a multitask function, in some cases without fully dedicated staff and/or lacking specialization. This situation, together with the relatively small size of the MI departments, may compromise customer service, decelerate innovation, and impact on the development of the MI role.

To comply with existing legislation (*European Parliament*, 2001; *Efpia* 2019) and self-regulation, MI departments impose strict quality monitoring and metrics to determine whether the service is meeting predefined standards (*Health Information and Quality Authority*, 2013). Common measures reported included auditing, customer satisfaction surveys (**Khan**; **Bawden**, 2000), the number of answers provided, and the response time. Answering enquiries using approved standard MI responses is another way of ensuring quality and consistency. In this survey, most respondents reported the use of specific software for managing standard responses/letters and tracking queries. These tools contribute to shortening the response time, increasing efficiency, and guaranteeing consistency. The implementation of these measures indicates that MI departments make efforts to ensure high-quality services; nevertheless, there is limited information on how the data collected are further used. Based on the high number of interactions, and the expanded use of tracking tools, there is an opportunity to develop insights to anticipate information needs.

At present, most pharmaceutical and biotechnological companies have an MI department staffed by MI specialists, commonly graduates in the health sciences (**Wu**; **Smith-Schmelz**; **Doshi**, 2013; **Guillot**; **Fung**, 2010; **Albano** *et al.*, 2016; **Marasigan** *et al.*, 2020). This situation will presumably be consolidated in the future as most survey respondents declared that a health sciences degree is a requirement for new employees in their MI department. Answering increasingly complex questions for a variety of customers requires a strong scientific background. In this study, pharmacy was the most common degree among MI staff; this background provides the knowledge required to communicate complex medical information, interact with HCPs (health care professionals) and consumers, and collect adverse events (**Guillot**; **Fung** 2010). A recent study (**Nguyen**, 2018; **Nguyen**, 2020) on the role of pharmacists as MI specialists in the pharmaceutical industry pointed out that pharmacy education does not cover all their needs and recommended that pharmacy trai-

ning include more opportunities to prepare students for careers in MI. It is worth noting that the current survey revealed an increase in the number of employees with a health sciences degree in comparison with 15 years ago (**Tabuenca-Cortés** *et al.*, 2004), indicating that MI departments are adjusting their capabilities. However, a high percentage of respondents declared that they did not have a dedicated training program for MI, although this gap has been clearly identified. There is a need for academic programs for professionals who are willing to develop a career in MI departments in pharmaceutical companies. It is hoped that an ongoing initiative on MI education led by *AMIFE* will cover this gap in Spain in the future.

> There is a need for academic programs to professionals willing to develop a career in MI departments in the pharmaceutical companies

More respondents declared that they reported to medical departments in the current survey (83%) compared with in 2004 (75%). No respondents stated that they reported to any business area, while this was the case for 5% of respondents in 2004. This may help to completely remove the long-lasting perception that MI departments play a role in improving physician–sales representative relationships.

Along with technological advancements, customers expect multichannel capabilities when interacting with pharmaceutical companies. The results of this survey show that the most widely used channels for MI enquiries were email and telephone, although new channels such as chat, social media, and especially web (56%) are arising. There is a great opportunity for MI to build digital strategies and plan technological investments to provide services via virtual environments. Indeed, physicians and other HCPs feel that social media is somewhat, very, or extremely valuable for interacting with pharmaceutical companies (**TenBarge**; **Riggins**, 2018). There is a need to implement innovative solutions that are compliant with this digital space.

Three companies declared that their MI service was totally externalized, and nearly half of companies stated that it was partially externalized. Outsourcing of MI responsibilities is a growing trend, although there is still room to maximize the opportunities to externalize tasks in order to focus in-house resources on more specialized tasks requiring in-depth company knowledge (**Marasigan** *et al.*, 2020).

This study has some limitations. As no validated, comprehensive list of MI contacts in the pharmaceutical industry in Spain was found, we used the *AMIFE* members database to identify MI contacts and contacted them via phone or email to confirm the details. We cannot affirm that all companies with an MI function or department were invited to participate in the survey. We can confirm that the survey was answered by one person responsible for MI per company. Analysis of the demographic data indicates that the pharmaceutical companies included in the study were representative of the total, with a potential deviation in favor of international companies. Despite the definitions and scope of the different terms that we provided, the terminology used in companies could be different, which could affect the consistency of the results. Despite these limitations, the results of this study contribute towards obtaining relevant information on current MI practice across the pharmaceutical industry in Spain.

5. Conclusions

Over the past 15 years, MI departments in the pharmaceutical industry in Spain have evolved in certain aspects while others have remained quite similar. The analysis of the results of this survey reveal some of the challenges faced by MI departments and the elements of the organization that may require special attention.

As in the past, MI departments continue to be responsible for a variety of tasks, and this drives a lack of specialization. To ensure that professionals are ready to address these challenges, MI specialists require specific training plans to fill important gaps in product and disease knowledge, understanding evidence, communication skills, and social media. The current profile of the MI professional (mostly with a scientific background) seems to be adequate to achieve this goal. With the aim of alleviating the lack of specialized training, the *AMIFE* professional group, in cooperation with a Spanish university, is working on the preparation of a university expert course. This academic program will include the training needs identified in Table 3.

In parallel, to meet the changing needs and preferences of their customers, MI departments must continue to assess new channels such as social media and develop their MI services in the face of the digital transformation. Another aspect that can contribute to service improvement is deeper understanding of customer needs and expectations. Ways must be found to analyze customer interaction data and transform them into meaningful insights.

Smaller MI departments must find ways to manage the growing information demands from different types of customers for a complex and varied portfolio. Maximizing the advantages provided by IT and new communication channels as well as the externalization of core services seem to be good opportunities to evaluate. The outsourcing of certain core activities (especially by companies with small MI departments) may enable internal staff to migrate from performing a wide range of activities to a more specialized role. This expertise may open development opportunities within other areas in the company or allow the implementation of innovative services and channels.

Internally, MI specialists require development plans and a career path, which will help to attract and retain talent.

Conflict of interest

The authors declare that they have no competing or financial interests in relation to this work.

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7. Appendix - Questionnaire

SURVEY ON MEDICAL INFORMATION SERVICES IN THE SPANISH PHARMACEUTICAL INDUSTRY

Q1. How would you classify the company you work for? By its geographical scope. If you answer national, go to question 3.

- National (only operates in Spain)
- International with headquarters in Europe
- International with headquarters outside Europe
- International based in Spain

Q2. How would you classify the company you work for? By its size worldwide

- Between 1,000 and 10,000 employees
- Between 10,000 and 25,000 employees
- Between 25,000-50,000 employees
- More than 50,000 employees

Q3. How would you classify the company you work for? By its size locally

- Less than 100 employees
- Between 100 and 1,000 employees
- More than 1,000 employees

Q4. How would you classify the company you work for? By its orientation or company type

- Biopharmaceutical company
- Biotechnology company
- other (please, specify)

Q5. Is there a MI service/department in your company?

- Yes
- No
- Fully outsourced / outsourced service

Q6. What position / department within your company currently assumes the tasks and / or responsibilities of MI? You can select more than one.

- Customer Service
- Quality
- Medical Director
- Pharmacovigilance
- Market Access
- Marketing
- Medical Scientific Liaison (MSL)
- Clinical Operations
- Regulatory
- None
- Others (please, specify)

Q7. Within your company, who does outsourced service depend on? You can select more than one.

- Customer Service
- Quality
- Medical Director
- Pharmacovigilance
- Market Access
- Marketing
- Medical Scientific Liaison (MSL)
- Clinical Operations
- Regulatory
- None

Q8. When was the area / Dept of MI created in Spain?

- Less than 5 years
- 5 to 10 years old
- More than 10 years

Q9. In your company, can employees of MI service/department work from home?

- Yes always
- Never
- Sometimes

Q10. How many people are currently employed in the MI service/department of your company in Spain? (Not including outsourced)

- 1
- 2
- 3
- 4
- 5
- > 5

Q11. What is the current professional profile of the MIT in your company? Indicate the number of MITs
For example: Pharmacists 2; Biologists 1; Doctors 1, etc.

- Biologists
- Nurses
- Pharmacists
- Graduates in documentation
- Physicians
- Chemists
- No university degree
- Other degrees in health sciences
- Other degrees (not health sciences)

Q12. How are MIT mainly organized in your company? You can select more than one.

You can select more than one
- By product
- By therapeutic area / business unit
- By type of query
- By input channel (web, telephone …)
- All of them work in all areas
- Other (please, specify)

Q13. What area does the MI service/department report to in your organization?

- To Quality Control
- To Corporate Affairs
- To R+D
- To General Manager
- To Technical Direction
- To Customer Service
- To Medical Department
- Others (please, specify)

Q14. Who does the MITs report directly in their area/department to?

- Medical Director
- Manager/Coordinator/MI Supervisor
- Medical Advisor
- Pharmacovigilance Manager
- Others (please, specify)

Q15. What are the minimum educational requirements/academic background currently needed for MIT profile in your company?
You can select more than one

- Biologists
- Nurses
- Pharmacists
- Graduates in documentation (information science)
- Physicians
- Chemists
- No university degree
- Other degrees in health sciences
- Other degrees (not health sciences)

Q16.Does your company have a written document (job description) that describes the MIT roles?

- Yes
- No

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Q17. What tasks/responsibilities has the MI department in your organization? (select all suitable items)

- Response to basic inquiries (FT, Prospectus, FAQs)
- Response to complex queries
- Therapeutic area updates
- Product updates
- Market Access support
- File and documentation
- Therapeutic area / complete business unit
- Customer service telephone center (Answers to telephone inquiries)
- Coordination of activities in the region or with the central (liaison or contact work in the subsidiary)
- Preparation of written responses
- Evaluation of information resources
- Training in information search techniques
- Internal product training (e.g. training of the sales network)
- Library, subscription and bibliography management for internal use
- Management of subscriptions and other services to third parties
- Therapeutic area information
- Legislation (copyright ...)
- Participation on the product strategy or therapeutic area
- Presence in congress stands
- Responsibility on web pages
- Response to requests for scientific information on medicines
- Review and / or approval of promotional materials
- External user bibliography service (articles and searches)
- Support to the area of publications (medical writing, edition...)
- Translations
- Other (please, specify)

Q18. Is there in your organization a specific training program for MI professionals in the area / department? If you answer NO, skip the next one and go to the question "What topics do you think is necessary ...".

- Yes
- No

Q19. Which of the following topics are included in the training program of the MI professionals in your company?

- IT tools
- Bibliographic searches
- Scientific writing
- Biomedical statistics
- Pharmacovigilance
- Sources of biomedical information
- Critical reading
- Legislation (including copyright)
- Pathology / therapeutic area / product
- Customer communication techniques
- Social networks, digital channels
- Other (please, specify)

Q20. What subjects / areas do you think is necessary to train the personnel working in the MI department?

- IT tools
- Bibliographic searches
- Scientific writing
- Biomedical statistics
- Pharmacovigilance
- Sources of biomedical information
- Critical reading
- Legislation (including copyright)
- Pathology / therapeutic area / product
- Customer communication techniques
- Social networks, digital channels
- Other (please, specify)

Q21. Have MI professionals the possibility of furthering their career (promote) within their functions in the department?
- Yes
- No
- Don't know

Q22. If there is the possibility of promoting in the area, how many steps does this promotion ladder have? (within MI functions)
- 1
- 2
- 3
- >3
- There is not promotion ladder

Q23. Does your company have a specific computer system to record / track queries?
- Yes local
- Yes global
- None

Q24. Does your company have a specific computer software for managing standard content: medical letters, answers to frequently asked questions, etc.?
- Yes local
- Yes global
- None

Q25.The development of standard responses is done at your company at…
- Local
- Regional
- Global
- Combination of the above
- No standard responses are developed

Q26. In the year 2018, how many inquiries (any type of request, including publications) did the MI department attend in Spain?

Q27. In your company, are some of the MI functions outsourced / outsourced? If you answer is NO, skip the next one and go to the question "Do you perform any type of measurement in MI …".
- Yes
- No

Q28. What aspects / tasks of MI are outsourced in your organization?
- Response to basic inquiries (FT, Prospectus, FAQs)
- Response to complex queries
- Therapeutic area updates
- Product updates
- Market Access support
- File and documentation
- Therapeutic area / complete business unit
- Customer service telephone center (Answers to telephone inquiries)
- Coordination of activities in the region or with the central (liaison or contact work in the subsidiary)
- Preparation of written responses
- Evaluation of information resources
- Training in information search techniques
- Internal product training (e.g. training of the sales network)
- Library, subscription and bibliography management for internal use
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- Review and / or approval of promotional materials
- External user bibliography service (articles and searches)

- Support to the area of publications (medical writing, edition…)
- Translations
- Other please, specify)

Q29. Do you perform any type of activity measurement in MI (Performance Metrics or KPI)? If you answer NO, skip the next one and go to the question "How is the MI service evaluated?".

- Yes
- No

Q30. What do you measure? You can select more than one.

- Number of information requests
- Response time
- Customer type
- Requests by product / therapeutic area
- Type of questions
- Other (please, specify)

Q31. How is the MI service evaluated?

- Audits
- Quality of service
- Using Satisfaction Surveys
- Not evaluated
- Other (please, specify)

Q32. Do you have any general response time objective (Performance Indicator)?

- Bibliographic requests
- Basic consultations (FT, Prospectus, Standard answers)
- Complex consultations

Q33. What ways are the MI requests channeled in your company? Check all currently used

- Phone
- Email
- Post mail
- Fax
- In person
- Chat
- Web
- App
- Social media
- Other (please, specify)

Q34. Does the MI service currently have, locally or globally, or is it in the process of putting into operation any of the following technologies or services?

- Website with contact information
- Website with scientific content
- Chat
- Chatbot
- *Twitter*
- *Instagram*
- *WhatsApp*
- *Facebook*
- Other (please, specify)