

Identification, Analysis, and Communication of Trends and Signals from Medical Information Inquiries in the Pharmaceutical Industry

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BACKGROUND

Meeting the healthcare needs of patients is crucial for pharmaceutical companies.¹ A common method for pharmaceutical companies to identify healthcare needs is by uncovering key themes and emerging trends through the analysis of medical information inquiries received by drug information departments.² Since drug information groups are product and therapeutic knowledge experts, the drug information department can provide incremental value to strategic business partners through effective analysis and communication of trends and signals identified in the healthcare arena. The goal of this research project is to understand current practices used by pharmaceutical companies to identify best practices for analyzing medical information inquiries.

OBJECTIVE

To benchmark current practices for the identification, analysis, and communication of trends and signals from medical information inquiries by drug information departments within the pharmaceutical industry in the United States.

METHODS

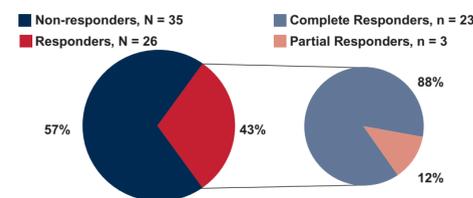
- In December 2008, an invitation to participate in an anonymous, 14-question, electronic survey was sent to 61 contacts who work in drug information departments from 31 U.S. pharmaceutical companies, including both pharmaceutical and biotechnology companies.
- Contacts were instructed to complete or forward the survey to individuals responsible for analyzing medical information inquiries from external customers.
- The survey questions were grouped in the following manner:
 - Five questions identified company and respondent demographics.
 - Five questions investigated methods for identification and analysis of trends and signals from medical information inquiries.
 - Three questions examined methods for communicating trends and signals from medical information inquiries.
 - One optional question allowed respondents to include any other information relevant to the identification, analysis, and communication of trends and signals from medical information inquiries.

RESULTS

Company and Respondent Demographics

- Twenty-six recipients participated in the survey, leading to a response rate of 43% (26/61) (Figure 1).
- Of the 26 respondents, 23 respondents completed all 13 required questions, giving a complete response rate of 88% (23/26) among participants (Figure 1).

Figure 1 – Response Rate and Complete Response Rate Among Participants.



- A majority of the respondents [83% (19/23)] work in departments identified as 'Medical / Drug / Information / Communications' by their company, and other respondents work in departments identified as 'Medical Affairs' or 'Medical Resources.'
- The respondents' company titles ranged from Senior Scientist to Vice President with Senior Manager being the most common title.

Figure 2 – Company Sizes Base on Number of Employees, N = 26.³

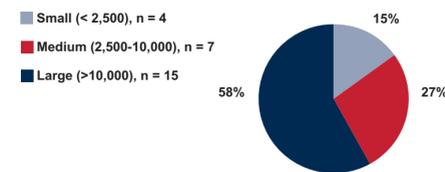
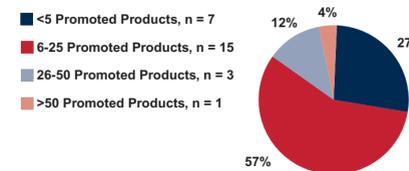


Figure 3 – Number of Supported Promoted Products by Department, N = 26.



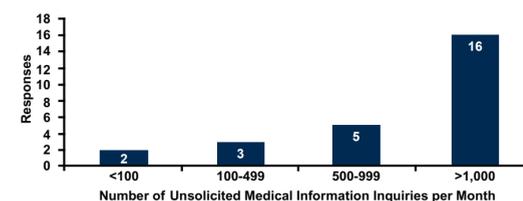
- The activities and number of unsolicited medical information inquiries received per month by the respondents' drug information departments are depicted in Table 1 and Figure 4, respectively.

Table 1 – Departmental Activity.*

Departmental Activity	Number of Responses, n (% of Respondents)
Identification, analysis, and communication of trends and signals from medical information inquiries	24 (92%)
Response to unsolicited Health Care Professional technical questions on products	24 (92%)
Creating clinical responses	22 (85%)
Medical review of promotional materials	21 (81%)
Medical review of sales training materials	20 (77%)
Creating formulary dossiers	19 (73%)
Drug safety information collection	18 (69%)
Publication planning	9 (35%)
Creating slide decks and other materials for field liaison group	8 (31%)
Other	5 (19%)

*Respondents (N = 26) were able to check all that apply.

Figure 4 – Number of Unsolicited Medical Information Inquiries per Month, N = 26.



Identification and Analysis of Medical Information Inquiries

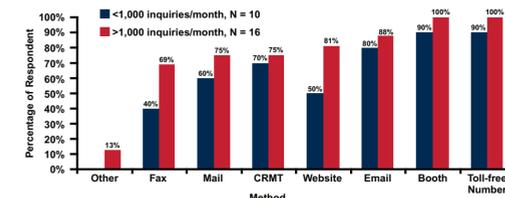
- The two most common methods drug information departments receive medical information inquiries is from their toll-free telephone number or medical information booths held during medical / scientific meetings (Table 2).
- Regardless of the number of medical information inquiries received per month, medical information booths held during medical / scientific meetings and toll-free telephone numbers are the most common method of receiving medical information inquiries (Figure 5).
- The three most common pieces of information used to identify trends and signals from medical information inquiries include the volume of inquiries, the product inquired, and the topic of the clinical reply sent out (Table 3).

Table 2 – Method of Receiving Medical Information Inquiries.*

Method	Number of Responses, n (% of Respondents)
Toll-free telephone number	25 (96%)
Booths in medical / scientific meetings	25 (96%)
Email	21 (81%)
Customer relationship management tool (includes questions submitted by field medical liaisons or sales representatives)	19 (73%)
Medical Information or Brand Website	18 (69%)
Mail	18 (69%)
Fax	15 (58%)
Other	2 (8%)

*Respondents (N = 26) were able to check all that apply.

Figure 5 – Method of Medical Information Retrieval by Number of Medical Information Inquiries per Month, N = 26.*



*Respondents were able to check all that apply. Abbreviations: CRMT – Customer Relationship Management Tool (including questions submitted by field medical liaisons or sales representatives); Website – Medical Information or Brand Product website; Booth – Medical Information booths in medical / scientific meetings; Toll-free number – toll-free telephone number.

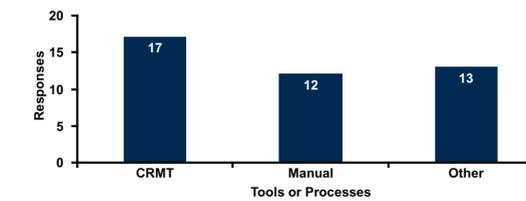
Table 3 – Information Used to Identify Trends and Signals from Medical Information Inquiries.*

Information	Number of Responses, n (% of Respondents)
Product inquiry volume	25 (96%)
Product	21 (81%)
Clinical reply topic	19 (73%)
Verbatim content	14 (54%)
Special event (e.g., scientific meeting, press or media activity)	14 (54%)
Customer demographics	13 (50%)

*Respondents (N = 26) were able to check all that apply.

- Figure 6 shows the tools and processes that respondents utilize to identify and analyze medical information inquiries.
- In this survey, small company respondents did not perform manual capture for identifying and analyzing trends and signals from medical information inquiries.
- Survey respondents from departments receiving > 1,000 inquiries per month tended to perform manual capture for identifying trends and signals from medical information inquiries.

Figure 6 – Tools and Processes Utilized to Identify and Analyze Medical Information Inquiries, N = 25.*



* Respondents were able to check all that apply. Abbreviations: CRMT – Customer Relationship Management Tool; Manual – manual capture.

- Thirteen respondents are directly involved with the identification and analysis of trends and signals from medical information inquiries.
- Seventy-two percent (18/25) of respondents answered that managers from drug information departments are responsible for identifying and analyzing medical information inquiries (Table 4).

Table 4 – Personnel Responsible for Identifying and Analyzing Medical Information Inquiries.*

Title	Number of Responses, n (% of Respondents)
Manager	18 (72%)
Director	9 (36%)
Other	9 (36%)
Associate Director	7 (28%)
Senior Director	5 (20%)
Not Applicable	1 (4%)

*Respondents (N=25) were able to check all that apply.

- Table 5 depicts methods used by respondents to validate trends and signals identified from medical information inquiries.
 - Forty-eight percent (12/25) of respondents do not validate trends and signals.
 - For the 52% (13/25) of respondents who do validate, the most common method of validation is through comparison with customer feedback from field medical liaisons, sales representatives, or speaker programs.
 - For the 12 respondents from departments that perform manual capture to identify and analyze trends and signals from medical information inquiries, 58% (7/12) do not validate, 17% (2/12) validate by comparing with customer feedback and medical literature, 8% (1/12) validate by only comparing with customer feedback, and 17% (2/12) utilize other methods not specified.

Table 5 – Method of Trend and Signal Validation.*

Method	Number of Responses, n (% of Respondents)
Do not validate	12 (48%)
Comparing with customer feedback from field medical liaisons, sales representatives, or speaker programs	10 (40%)
Medical literature	5 (20%)
Other	2 (8%)
Marketing research	1 (4%)

*Respondents (N = 25) were able to check all that apply.

Communication of Knowledge

- Once trends and signals are identified and validated, the end result is knowledge. A knowledge report is often communicated to internal partners through a variety of methods.
- More than half of the respondents disseminate knowledge reports to the Medical Affairs, Medical Liaisons, and Marketing groups (Table 6).
- The two most common methods for communicating the knowledge report are through email [44%, (11/25)] and presentations [28%, (7/25)] (Figure 7), and email is the most common method regardless of company size.
- Among all respondents, knowledge reports are most commonly disseminated once a month [38% (9/24)] (Table 7).

Table 6 – Departments that Receive Knowledge Reports.*

Department	Number of Responses, n (% of Respondents)
Medical Affairs	18 (72%)
Medical Liaisons	14 (56%)
Marketing	13 (52%)
Regulatory Affairs	6 (24%)
Drug Safety	5 (20%)
Other	4 (16%)
Sales	4 (16%)
Not applicable	3 (12%)
Market Research	2 (8%)
Account Management	1 (4%)

*Respondents (N = 25) were able to check all that apply.

Figure 7 – Methods for Communicating Knowledge Reports, N = 25.

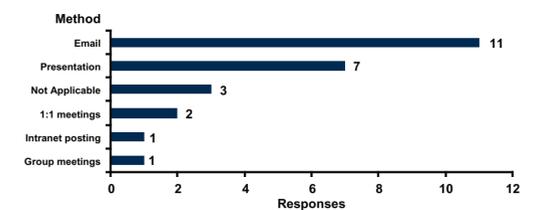


Table 7 – Frequency of Knowledge Report Communication, N = 24.

Method	Number of Respondents, (%)
Once a month	9 (38%)
Quarterly	7 (29%)
As needed	5 (21%)
Not applicable	3 (13%)

CONCLUSION

- Medical information inquiries are most commonly received through the toll-free, drug information telephone number and medical information booths at medical / scientific meetings among all respondents regardless of the number of inquiries received by the department per month.
- Trends and signals from inquiries are commonly identified and analyzed by referring to the volume of inquiries for a specific product, the inquired product, and the topic of written response sent to external customers; and most pharmaceutical companies utilize a customer relationship management tool to help identify and analyze these trends and signals.
- Approximately half of the respondents validate trends and signals identified from inquiries and frequently by comparing customer feedback from field medical liaisons, sales representatives, or speaker programs.
- Knowledge reports are generally communicated to Medical Affairs, Medical Liaisons, and Marketing groups through an email or a presentation on a monthly basis.

LIMITATIONS

- Low number of respondents and unequal distribution of respondents among large-, mid-, and small-sized companies.
- Bias may be introduced into the results since it is possible for more than one respondent to be from the same pharmaceutical company.
- Only 13 respondents are directly involved with identifying and analyzing inquiries.
- The survey question referring to methods utilized for communicating knowledge reports failed to allow respondents to choose more than one answer; thus, limiting the external validity of the results.
- The survey question referring to the frequency of knowledge report communication could have been structured to allow respondents to choose more than one answer to provide more accurate results.

REFERENCES

- Scientific Intelligence – Effective Written Communications [Live meeting / Central Intelligence Function (poster)]. Presented at the Drug Information Association, 40th Annual Meeting, Washington, DC USA; June 15, 2004.
- Chadha, P. Vatanapradit, T. Charlam, A. et al. Rationale and Implementation of a Medical Intelligence Function [poster]. Presented at the Drug Information Association, 40th Annual Meeting, Washington, DC USA; June 15, 2004.
- CNN Money. Fortune: 100 Best Companies to Work for 2007. Available at: <http://money.cnn.com/magazines/fortune/bestcompanies/2007/index.html>. Accessed 12, Feb 2009.