

White Paper

IQVIA INSIGHTS LEVERAGE CMS DATA FOR STRATEGY DEVELOPMENT

DARREN JONES, Senior Principal, Commercial Compliance Consulting Global Practice Leader **JENNIFER BANG**, Senior Consultant, IQVIA Commercial Compliance **SAM ZAKRZEWSKI**, Consultant, IQVIA Commercial Compliance



TABLE OF CONTENTS

Introduction and Executive Summary	1			
Introduction to CMS Open Payments Database	2			
Engagement Strategy I: Speaker Bureau Analysis				
Brand-by-Brand Comparisons	2			
Engagement Returns of Promotional Spending	3			
Engagement Strategy II: KOL Recruitment and Retention	3			
KOL Profiles	4			
HCP Targeting by Brand and Geography	4			
Targeting by Specialty	5			
Engagement Strategy III: HCP Field Engagements	5			
Engagement Strategy IV: Mapping Opportunity KOLs	6			
Determine when to Engage with Accounts	6			
Conclusion: Activating the Value in HCP and KOL Insights				

INTRODUCTION

INTRODUCTION AND EXECUTIVE SUMMARY

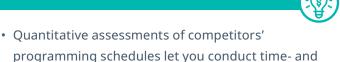
Are you leveraging compliance data to inform critical business decisions about your promotional programming? To improve your educational reach and cultivate deeper engagement with HCPs, data that is publicly available from The Centers for Medicare & Medicaid Services (CMS) Open Payment platform can be a valuable source of information.

When combined with IQVIA's proprietary and unparalleled data and analytics services, Open Payments data provides the basis for commercial activity guidance for how Life Sciences companies can better engage with healthcare professionals and key opinion leaders (KOLs).

IQVIA develops brand- and channel-specific analyses about commercial engagements that offer a comprehensive view of the competitive landscape. These insights can guide Life Sciences companies in refining and enhancing the structure, scope and duration of their speaker programs, and they can further help to identify, recruit and retain both KOLs and attendees for engagements.

By determining how, where, and when HCPs engage with educational programming, manufacturers gain visibility into trends and preferences that can inform market strategy in the following ways (strategies that are examined in greater detail further on in this report):

The CMS Open Payments platform assists Life Sciences companies in a competitive capacity by providing a rich, often-overlooked source of information when combined with IQVIA data and proprietary analytics.



 Targeting and mapping aids in identifying participants throughout the life cycle of a product or brand

field-specific targeting to deploy resources most

effectively

· Speakers bureau insights ensure that you're not overpaying on speaker fees

Data on payments as well as key behaviors pertaining to KOLs' schedules and travel preferences give Life Sciences companies the information they need to identify, recruit, and retain both KOLs and attendees for engagements. Promote improved resource allocation with insights like the following:

- · Granular insights let you find valuable KOLs who are most likely to be brand-loyal ambassadors
- Determine before engagement which ones will make the best candidates for national programs based on how far and how often they are willing to travel



INTRODUCTION TO CMS OPEN **PAYMENTS DATABASE**

When the Affordable Care Act was passed, a mandate in it stipulated that manufacturers of drugs and devices create a payments reporting program, which became the CMS Open Payments platform. Through Open Payments, CMS has captured payments and TOV data every year since January 2013.

The platform includes detail on payments and other transfers of value to physicians and teaching hospitals, and it will be expanded in 2022 to also include nurse practitioners, physician assistants, clinical nurse specialists, registered nurse anesthetists, and certified nurse midwives. Although mandated for compliance purposes, the CMS Open Payments platform assists Life Sciences companies in a competitive capacity by providing a rich, often-overlooked source of information when combined with IQVIA data and proprietary analytics.

ENGAGEMENT STRATEGY I: SPEAKER BUREAU ANALYSIS

CMS Open Payments data yields competitive insights that can inform a Life Science company's speaker program activity in many ways. This is critical in today's market environment. While traditional pharmaceutical sales and marketing strategic development were based on past experiences, descriptive analytics, and prior sales-based predictions, these methods today fall short in the current climate.

Enhanced regulatory compliance reporting requirements and more tightly conscripted budgets demand quantitative and analytical tactics. Applying A.I. and machine learning allows for insights into behavioral patterns that were once, at best, ascertained by mere guesswork.

This insight allows for comparative analyses among competing brands to determine how one brand's speaker bureau and individual speaker activity may differ from another. Companies gain visibility into total dollar spending, month-by-month speaker program transactions, and monthly and yearly program volume comparisons. Enhanced trend analyses also provide additional insights into how speaker bureaus evolve over time based on various factors such as new market entrants, changes in geo-targeting strategies, and size of the speaker bureau budget.

This insight allows for comparative analyses among competing brands to determine how one brand's speaker bureau and individual speaker activity may differ from another.

BRAND-BY-BRAND COMPARISONS

Enhanced insight allows for the kind of precise targeting the Life Sciences industry needs in order to succeed, starting with budgets and resource allocation. Companies can gain visibility into total dollar spending as well as month-by-month speaker program transactions, in addition to total program volume on month-to-month as well as year-over-year comparisons.

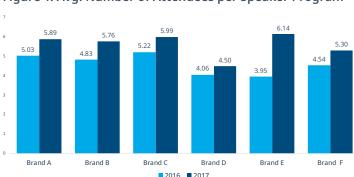


Figure 1: Avg. Number of Attendees per Speaker Program

Life Sciences companies can benchmark their activities and spending against those of competing brands or products, cross-referenced by volume and costs. They can learn the total number of unique speakers engaged and average number of programs per speaker.

For example, Figure 1 shows brand-by-brand comparisons of the average number of HCP attendees per program between 2016 and 2017.

Figure 2: Performance and Reach of Speaker Program Spending

		# Total Attendees	% Unique Attendees	# Total Speaker Programs	Avg # Attendees per Speaker Program
2 0 1 6	Brand A	13,629	81%	2,813	5.03
	Brand B	7,127	85%	1,426	4.83
	Brand C	6,453	83%	1,236	5.22
	Brand D	1,323	95%	330	4.06
	Brand E	7,011	81%	1,764	3.95
	Brand F	3,892	86%	843	4.54
	Brand A	15,953	79%	2,704	5.89
2	Brand B	9,400	80%	1,624	5.76
0	Brand C	6,245	81%	1,062	5.99
1 7	Brand D	1,211	82%	252	4.50
	Brand E	15,790	32%	2,570	6.14
	Brand F	2,620	51%	511	5.30

ENGAGEMENT RETURNS OF PROMOTIONAL SPENDING

In addition to total volume and spending, a Life Sciences company can gain insights into the performance and reach of their speaker program spending, thanks to a breakdown of the number of attendees per speaker program and the percentage of those who were unique (non-repeating) attendees.

Although the number of attendees per program [Figure 2] across a selection of six competitive brands was

consistently higher across the board in 2017 compared to the previous year, an observer can discern that the percentage of unique attendees was much higher in 2016.

As such, one can infer that Brand E, although it had the highest average number of attendees—6.14 in 2017—also recorded the lowest percentage of unique HCP engagements in that year. Indeed, Brand E saw only 32 percent unique attendees in 2017, nearly 20 percentage points lower than the next competing brand and a whopping 50 percentage points lower than the brand that activated the greatest number of unique engagements that year.

ENGAGEMENT STRATEGY II: KOL RECRUITMENT AND RETENTION

Engagement with KOLs is a lynchpin of any successful promotional education strategy, and CMS Open Payments data, augmented by the algorithmic analysis that facilitates IQVIA insights, can give a Life Sciences company a roadmap for how to facilitate and cultivate these relationships.

KOL identification strategies must focus on the opportunities that will be most beneficial and effective in promoting the brand and engaging the HCP community. At the most basic level, KOLs that are most beneficial to a brand's commercial strategy are those that speak solely

> KOLs that are most beneficial to a brand's commercial strategy are those that speak solely for a single brand of a set of competitors, have a large professional network of HCP relationships, and are willing to travel and cover a wide geography to engage HCPs.

Figure 3: Opportunity KOLs by Brand		Brand A		Brand B			Brand C				
Physician ID	Full Name	Most frequently spoke for (in 2017)	Brand A %	# SPs led	Avg pmt per SP	Brand B %	# SPs led	Avg pmt per SP	Brand C%	# SPs led	Avg pmt per SP
123	Shane F.	Brand B	0%	0	n/a	100%	2	\$3,600	0%	0	n/a
1020	David G.	Brand B	0%	0	n/a	70%	7	\$3,600	30%	3	\$1,100
1053	Perry L.	Brand C	0%	0	n/a	40%	4	\$3,600	60%	6	\$2,500
1329	Donnie B.	Brand B	0%	0	n/a	70%	7	\$2,700	30%	3	\$1,100
3096	Julian M.	Brand B	0%	0	n/a	70%	7	\$2,700	30%	3	\$1,100
3268	Johnny U.	Brand B	0%	0	n/a	80%	8	\$3,600	20%	2	\$3,700

for a single brand of a set of competitors, have a large professional network of HCP relationships, and are willing to travel and cover a wide geography to engage HCPs.

It is important to assess the individual HCP, agnostic of brands' strategies, as well as profiles on each brand's engagement at a macro level.

Figure 4: Speaker Coverage by Region





KOL PROFILES

IQVIA develops KOL profiles to include the KOL's speaking activity, travel activity, and diversity of brand engagement, to target the individual HCPs, agnostic of the brands' strategies. This provides brands with a rich dataset of HCPs identified by their office location, allowing the brands to include the HCPs in their call list.

The above graph [Figure 3] displays the opportunity KOLs for Brand A, with a breakdown of how many speaker programs they have led for competing brands, and the average payments received by competing brands.

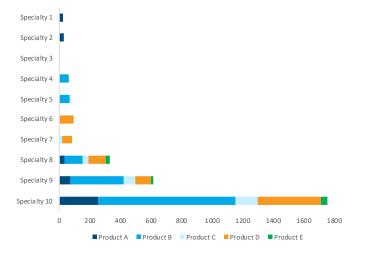
HCP TARGETING BY BRAND AND GEOGRAPHY

A secondary analysis should focus on HCP targeting by brand. The value of this analysis involves understanding how competing brands engage HCPs, the total numbers of HCPs engaged, dollar amounts paid, engagement counts, specialties engaged, and geographic coverage, as well as "white space" (i.e., where each brand lacks HCP engagement).

Geographic heat maps can be used to present differences in HCP speaker coverage. The heat maps (in Figure 4) show speaker coverage of two brands, with the darker shades of yellow and green indicating a higher density of speakers. Brand A clearly has more speakers located throughout the country, yet, this does not necessarily mean that this is where speaker programs are being held. Similarly, Brand B has lower coverage in terms of the locations of their speakers, but it is possible that their speakers are willing to travel greater distances.

The comparison of the specialties engaged by multiple brands reveals differences in which specialties may be considered a greater focus for the brand within their therapeutic area. [Figure 5] provides an example of this comparison.

Figure 5: Top 10 Most Frequently Targeted Specialties



Life Sciences companies working with IQVIA and Open Payments data also can get speaker program breakdowns by attendee counts, identifying which HCPs work for a single brand versus multiple brands—all of which can be similarly analyzed for actionable insights.

TARGETING BY SPECIALTY

Initial impressions of the specialties and volumes engaged by each brand, show that although Specialty 10 received the most attention from all brands, there are opportunities for brands in other specialties that may not have been considered, a de facto network of HCP relationships that may be untapped (e.g., Product B with Specialty 4 and Specialty 5).

By leveraging these analyses, Life Sciences companies can address individual HCP behavior, developing HCPtargeting strategies, and determining which speakers have the most potential to a specific brand.

ENGAGEMENT STRATEGY III: HCP FIELD ENGAGEMENTS

Life Sciences companies working with IQVIA and Open Payments data also can get speaker program breakdowns by attendee counts, identifying which HCPs work for a single brand versus multiple brands—all of which can be similarly analyzed for actionable insights.

IQVIA clients can also find out details such as how wellattended these programs are, along with percentages and counts of HCP specialities. In addition, algorithmic analysis predicated on machine learning allows them to obtain visibility into whether or not individual HCPs are brandloyal or engage with competitors.

In turn, layering that information over benchmarking about meal payment and venue costs incurred can give a manufacturer more information about whether higher costs are due to speaker honoraria or other related expenses. Armed with this information, the person or team in charge of speaker program management could determine whether or not to continue with the current program levels and brand specific funding, or if either increasing spending for greater interaction or lowering spending to be more efficient, would improve the number of engagements.

ENGAGEMENT STRATEGY IV: MAPPING OPPORTUNITY KOLS

The CMS Open Payments data as viewed through the IQVIA platform also provides manufacturers with tools to identify KOLs with which competitors engage. Being able to identify these opportunity KOLs and have some insights about their preferences in advance of making contact increases the likelihood of forging a successful relationship.

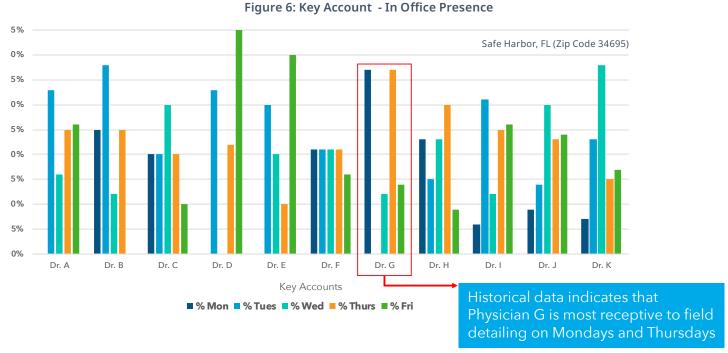
For instance, IQVIA users might be able to see, on a brand-level basis, the following data points: total number of KOLs, their respective specialty breakdowns, and geographic tiering by local, regional and national

Knowing when to target individuals is a better use of time and resources, and being in tune with these professionals is the foundation of what could be more involved relationships in the future. engagement. Brand exclusivity and loyalty can be layered over this to determine which speakers have the most potential value to a particular brand, and whether or not the compensation currently received reflects that.

This might sound complex, but IQVIA excels at accessibility, such as rendering these kinds of data points into a matrix to make visualization and identification simple. Case in point, a Life Sciences company could choose to group opportunity KOLs by geography to start the filtering process, then analyze speaking and field engagement opportunities separately.

DETERMINE WHEN TO ENGAGE WITH ACCOUNTS

HCP in-office behavior and availability presents a separate set of challenges. Generally, HCPs are becoming increasingly unavailable for in-office lunch-and-learns and visits from sales representatives. In consideration of the HCP's visitation preferences and maximizing the value of sales reps' in-office attempts, IQVIA assesses the individual HCP's proclivity to in-office engagements.



6 | IQVIA Insights Leverage CMS Data For Strategy Development

Figure 6 indicates when and how often key accounts professionals with the potential to be KOLs for brand engagement — can be engaged in-office.

Data about in-office engagements also can improve the effectiveness of your sales team; as indicated in Figure 6, insights about when particular physicians are available and willing to engage helps a sales rep know when, where and even how to engage them.

This graph indicates, simply and at a glance, that days in the middle of the work week are the best time to connect with the majority of physicians. Knowing when to target individuals is a better use of time and resources, and being in tune with these professionals is the foundation of what could be more involved relationships in the future.

Likewise, obtaining visibility into a KOL's travel preferences — do they only travel to certain parts of the country? Are there days when they choose not to travel? — can provide a Life Sciences company with a compelling competitive edge to recruiting new KOLs for therapeutic engagement. It can be much easier to recruit a professional as a KOL if the company has a proven track record of being flexible to his or her schedule.

CONCLUSION: ACTIVATING THE VALUE IN HCP AND KOL INSIGHTS

The value in the data gleaned from CMS Open Payments combined with IQVIA metrics and proprietary resources, is that it provides more than just a single snapshot. Instead, it offers Life Sciences companies the ability to dynamically measure engagement and results on a uniquely specific level.

Comparing current information with historical data can reveal long-running trends, or major shifts due to competitive, scientific, or regulatory changes in the field. These insights, in turn, can inform an IQVIA client on how to proceed with promotional activities conducted as part of a speaker program, through sales calls or other HCP points of contact.

As detailed above, Life Sciences companies can get realtime, granular visibility into:



- HCP engagement patterns over time and across field territories
- · Where and when your competitors have concentrated their resources
- How to capitalize on HCP interest in a particular product
- · Which specific KOLs to target for a particular program
- · What attributes will make a KOL a valued brand ambassador, and how their compensation should reflect that

IQVIA offers the tools to make it easier to visualize the results and present research findings to stakeholders without committing them to a deep (and time-consuming) dive into the raw data. Its cutting-edge technology allows it to optimize relevant data from the CMS as well as a host of industry sources, while its A.I.-driven aggregation tools helps Life Sciences companies develop strategies based on empirical evidence.

Ultimately, an optimized combination of skills is the key to empowering Life Sciences companies. In an unpredictable sales market and regulatory climate, they can create flexible and responsive plans, then communicate their strategies to stakeholders with customizable dashboards that distill this knowledge into actionable takeaways.

For more information about IQVIA's data analysis expertise, KOL scoring, and FMV methodology; or to learn more about how we can help you with your commercial compliance and HCP engagement management, please contact IQVIA Commercial Compliance at iqvia.com/contactus, or email commercialcompliance@iqvia.com.



DARREN JONES, Senior Principal, **Commercial Compliance Consulting** Global Practice Leader

Darren is a Senior Principal of IQVIA where he leads the global consulting practice dedicated to supporting client's compliance risk management needs. He has over 17 years of global experience supporting the broad business and compliance needs of large global pharmaceutical manufacturers, as well as emerging biotech companies and medical technology. Darren has led compliance consulting engagement across all healthcare interaction risk areas, and has developed deep expertise in commercial and medical affairs operations.



JENNIFER BANG, Senior Consultant, **IQVIA Commercial Compliance**

Jennifer is a healthcare compliance attorney and an economist. She consults on various types of compliance projects across risk areas at IQVIA, including compliance operations program development, business process enhancement/optimization, auditing & monitoring, risks/needs assessments, policy/SOP development, and FMV assessments. She leads data analytics team and develops compliance analytics suite offerings to help guide life sciences companies make better informed business decisions.



SAM ZAKRZEWSKI. Consultant. **IQVIA Commercial Compliance**

Based out of IQVIA's New York City office, Sam works as a Consultant for IQVIA Commercial Compliance. Sam's work involves various top global life science companies with complex compliance challenges, addressed through a focus on process excellence, regulatory compliance, and risk management. Additionally, Sam supports projects on US and global Fair Market Value, Risk & Needs Assessments, Data Analytics, and Monitoring & Auditing programs.

Copyright © 2019 IQVIA. All rights reserved. WP.0088-1-02.2019

CONTACT US

Darren Jones
Senior Principal,
Commercial Compliance Consulting
Global Practice Leader
Darren.jones@iqvia.com
www.iqvia.com/contactus