The Quintessential KOL

Dr Kessel, a smiling, clean-cut physician and professor in his fifties, steps up to the podium. He is wearing what looks like a seersucker suit with a striped white and blue shirt and a yellow tie, a good outfit for very hot weather, as it is in Philadelphia on this summer day. Kessel, who was introduced as having authored over five hundred publications and being ‘one of the brightest stars in neuroscience’, gives his talk without PowerPoint, the first time he has done so in years, he says. A mishap that morning involving his cat and his laptop led him to scramble to assemble notes for this talk and one he will give later that afternoon to the same conference. Nonetheless, he is a confident speaker, comfortable providing his perspective to this audience, which is mostly made up of drug company managers. He is the representative key opinion leader (KOL) at a drug industry conference on how to manage relationships with people like himself.

After explaining how the cat lost his presentation, Dr Kessel discloses his conflicts of interest. This is a practiced move. With apparent pride, he announces: ‘In the past decade, I have been a consultant to the manufacturer of every compound that has been developed for the treatment of depression or the treatment of bipolar disorder, and some number of other compounds that haven’t made it through the multi phases stages of development.’ Normally, he presents this as two slides. He adds a list of six drug companies that have paid him to give talks in the past three years, and lists another four that have recently funded research projects.
Dr Kessel is the quintessential high-level researcher KOL, a nationally recognized expert who is personable and a good public speaker. Kessel started his connection with the industry in the 1980s, doing dinner speaker programmes, and later giving promotional talks, serving on various advisory boards, and helping to run speaker training programmes. There are different kinds of KOLs, corresponding to the many uses drug companies have for them. Kessel’s path to this point took him through all of the most common KOL roles.

In their efforts to capture the minds of doctors, drug companies often turn to KOLs. The abbreviation is standard within the industry, though they are also sometimes more modestly referred to as ‘opinion leaders’ or ‘thought leaders’.

The idea of a KOL has a sociological pedigree, stemming most directly from the work of Columbia University sociologist Paul Lazarsfeld. After his study of political views and voting behaviour during the United States Presidential election of 1940, Lazarsfeld coined the term ‘opinion leader’ for somebody who was particularly influential in their networks and among their peers. The concept and term were extended beyond politics and public affairs to other walks of life, including fashion, movies, and marketing more generally.

Its application to medicine began in the early 1950s, when, funded by a grant from Pfizer, Lazarsfeld’s student Elihu Katz and his co-workers studied the expansion of the prescribing of tetracycline. A decade later, the research was published as a well-regarded book, Medical Innovation, which became important to social network theory. On the basis of the data they saw, Katz and his colleagues recommended that Pfizer make systematic use of opinion leaders, explained how the company should do it, and provided details of their recommendations in the researchers’ report to Pfizer. Pfizer found the concept of opinion leaders so valuable that it paid the Columbia researchers to not publish the results in any medical journals, so that the company could get a small jump on its competitors. It wasn’t long, though, before others in the industry picked up the idea and put it to work. Although growth in the use of the idea was intermittent, KOLs are now a crucial part of pharma companies’ marketing efforts. They are key parts of the process of placing information around a molecule to create a successful drug.
THE PHYSICIAN KOL

One industry analysis defines KOLs as

> Highly respected medical experts within their domain, by which their thoughts and actions have a greater (asymmetric) effect on their peers with regards to adopting a new idea, product or service. In other words, KOLs have a large impact on the diffusion of innovation.\(^5\)

This definition reflects a relatively academic approach that descends from the 1940s and 1950s sociological work on opinion leaders. Its author and his company do different kinds of analyses, echoing Lazarsfeld’s work, to identify established and new KOLs who inhabit the centres of social networks.

But there also is a less academic approach. In an article on the importance of engaging KOLs on their own terms, the medical education and communications company (MECC) Watermeadow Medical writes that the term is usually

> a convenient shorthand for those people – usually eminent, usually physicians – who we co-opt into our development and marketing strategies.\(^6\)

KOLs are agents sent out by companies to convince doctors to prescribe particular products. This blunt definition is linked to a set of activities that not only identify potential KOLs, but also plan and implement campaigns to use them – to capture doctors’ minds and change their behaviours.

I divide KOLs into two groups: those who are identified primarily as physicians and those who are identified primarily as researchers. Drug companies and the agencies that work with them all have their own classifications of KOLs, for their own purposes; mine captures one of the important divisions in almost all of those classifications.

Today, drug companies generally hire physician KOLs only to give prepared talks to other doctors, usually in their own regions. Researcher KOLs, in contrast, may be hired to give talks at conferences or continuing medical education courses, to serve as consultants on clinical trials or advisory boards
for marketing or research, or to interact with companies by performing research and serving as authors on company manuscripts for publication in medical journals. In practice, these two groups are not fully distinct, and people move from one to another.

**Speaker Bureaus**

While the word ‘key’ before ‘opinion leaders’ might suggest that researcher KOLs are the model ones, there are many more physician KOLs and they are part of much larger industry programmes. The scale of the drug industry’s use of physician KOLs is sometimes staggering. Companies typically run thousands of talks per year for each of the drugs they are heavily promoting. For example, in Australia, with its small population, disclosures from forty-two pharmaceutical companies showed that between 2011 and 2015 they were running a weekly average of over 600 events for more than 10,000 attendees. Food was provided at 90% of those events.⁷

Because of their scale, the conversation among people who plan speaker bureaus (or speaker’s bureaus or speakers bureaus) is often about logistics: How can attendance be better recorded? How do competitors standardize speaker reimbursement? How can speakers be more efficiently reimbursed? Can paper records be eliminated in favour of electronic ones? For speaker bureau managers, volume is a problem, and for that reason they are interested in the software and hardware that can streamline their work.

Drug company manager Mr Mah, presenting at a KOL management conference, raises the spectre of a government investigation of a speaker programme: ‘When you say “I need 700 to 1000 speakers in this activity”, the questions [that are] going to get pushed back to you in investigations are, “Why do you need so many? How many is each speaker going to do? Why did you need a thousand?”’ With so many speakers, Mr Mah muses, government investigators might conclude that speakers’ fees are bribes to prescribe.

Of course, the core goal of speaker programmes is to help companies reach doctors. The companies send KOLs to get messages into doctors’ brains and prescribing habits into their hands. Mr McDonald, a KOL management agency
executive, makes this clear: ‘What’s really important there [in speaker programmes, medical symposia, etc.] is promotional effectiveness. It’s the ability to say, “How have we engaged that audience, are they better prepared?”’

But prepared for what? Kimberly Elliott, a former drug company sales representative, says, ‘Key opinion leaders were salespeople for us, and we would routinely measure the return on our investment, by tracking prescriptions before and after their presentations. … If that speaker didn’t make the impact the company was looking for, then you wouldn’t invite them back.’ Measuring sales before and after KOL talks and other events is common enough that industry insiders recognize that it may be risky since it may reveal the monetary stakes behind KOLs. Concerned about government scrutiny, pharma manager Mr Matthias warns: ‘This thought that you have a key opinion leader engagement with a group of doctors, and you measure sales before and after the engagement, that’s perhaps not the appropriate way to proceed.’ KOL speaking events have to appear to serve an educational purpose.

Typically, physician KOLs are nominated by sales representatives, who have a sense of their abilities. Sales reps will know what ‘their stage presence’ is, suggests Ms Legrand, a legal and regulatory compliance expert, or that ‘he looks good in a tie’ – though this latter is not an acceptable recommendation, she quickly interjects, because good looks aren’t connected to educational potential.

In an essay in the *New York Times*, psychiatrist Dr Daniel Carlat describes his invitation into the ranks of KOLs:

On a blustery fall New England day in 2001, a friendly representative from Wyeth Pharmaceuticals came into my office in Newburyport, Mass., and made me an offer I found hard to refuse. He asked me if I’d like to give talks to other doctors about using Effexor XR for treating depression. He told me that I would go around to doctors’ offices during lunchtime and talk about some of the features of Effexor. It would be pretty easy. Wyeth would provide a set of slides and even pay for me to attend a speaker’s training session, and he quickly floated some numbers. I would be paid $500 for one-hour ‘Lunch and Learn’ talks at local doctors’ offices, or $750 if I had to drive an hour. I would be flown to New York for a ‘faculty-development program’, where I
would be pampered in a Midtown hotel for two nights and would be paid an additional ‘honorarium’.9

When sales reps make KOL nominations, companies are hiring their customers, creating the potential for conflicts of interest. Sales reps might be trying to reward good customers by giving them speaking contracts, regardless of how convincing those speakers are to other doctors. For this reason, most companies vet nominated KOLs through their marketing and their medical departments – with no input from sales, insists legal expert Ms Legrand. Despite the professed checks, the companies still seem to see value in having customers who are speakers.

As Carlat tells us, a KOL programme begins with a training session, to ensure that the speaker is well versed in the positive aspects of the product, and able to speak about it effectively. The training allows KOLs to speak with conviction and to answer questions from their audiences. Dr Koch, a psychiatrist earning more than $100,000 per year giving talks for the drug industry, explains in an interview,

> Usually, [speaker training sessions] are two- to three-day meetings where you’re sort of in meetings from about 8 o’clock in the morning to about 5 o’clock at night for a few days where you’re learning about the clinical research, the FDA approval process for the medicine, get a chance to speak with some of the people that were involved in the original research, and sort of try to become more educated about the details.

After physician KOLs have been trained, they become part of a speaker bureau for a company, and wait to be offered opportunities. They may give talks in a variety of settings, but the most common are to doctors in clinics or at dinner events; more occasionally they will be asked to give a talk to a community group. In most of these cases, the talks are arranged by sales representatives. Transportation is booked, the time and place are set, invitations are sent and resent, and the equipment is set up and the food laid out. All the KOL has to do is deliver the presentation.
Not much training is needed to make the presentations themselves, because physician KOLs aren’t permitted to adjust the pre-packaged PowerPoint slides, or to deviate from their scripts. As Dr King reports, ‘So if I am doing a promotional programme for a company, I have to use the slide deck that they provide me – I am not allowed to alter it in any way and every word in that slide deck is basically reviewed by their own internal counsel.’

In addition to the slides and the scripts, answers to standard questions are also scripted, and speakers are trained not to answer questions in ways that might either be illegal or run against company interests. Dr Khan warns, ‘When you’re out there actually doing a talk, you really have to follow those rules to a T. If you don’t follow those rules then … you’re at risk of, you know, breaking procedure and I mean arguably I guess you’re at risk of breaking the law.’ The presentations are fully ghost-managed.

Talking about her experience as a sales representative working with KOLs, Elliott says, ‘I would give them all the information that I wanted them to talk about. I would give them the slides. They would go through specific training programmes on what to say, what not to say, how to answer to specific questions, so that it would be beneficial to my company’. These KOLs really are possessed, inhabited by the spirits of the companies they’re speaking for, like the original zombies of Haitian folklore.

Firms that identify and work with KOLs might even create training sessions to make those KOLs more effective. For example, Wave Healthcare claims on its website:

> It’s vital that advocates are able to communicate and influence colleagues with clarity and conviction. To ensure speakers are at the top of their game, we have developed a communication skills programme for clinicians.

Another firm, KnowledgePoint360, which owns Physicians World Speaker Bureau, offers programmes for training speakers, and its promotional material appears to treat KOLs and employees in the same terms: ‘Whether it is for external resources, such as speakers, or internal staff, including sales representatives and medical science liaisons, a robust training programme is
critical to the long-term success of any pharmaceutical, biotech, or medical device company.\textsuperscript{12}

KOLs can be very effective salespeople. According to a Merck study, the return on investment from KOL-led meetings with physicians was almost double the return on meetings led by sales reps.\textsuperscript{13} Physician KOLs make excellent mediators between drug companies and physicians.

One of the reasons that KOLs are so effective, even given the striking extent to which they are constrained, is that they serve as models for others to emulate, in addition to sharing information. When they speak, they generally not only communicate trial results, but also that they are acting on those results. Their audiences don’t have to translate the data into action, because the KOLs have already implicitly shown how to do that.\textsuperscript{14} As long as the KOLs can be presumed to be good and responsible physicians, they model the behaviour that pharma companies want to encourage.

**Pushing the Boundaries**

Some doctors who attend training sessions may not only be budding KOLs, but also targets, convinced to prescribe because of the excellent advertising provided in the training.\textsuperscript{15} This fits with claims made by sales representatives that one of the goals of a speaker programme is increased prescriptions by the speaker. Former sales representative Shahram Ahari writes that,

> [a]s a rep, I was always in pursuit of friendly ‘thought leaders’ to groom for the speaking circuit. Once selected, a physician would give lectures around the district. … The main target of these gatherings is the speaker, whose appreciation may be reflected in increase prescribing of a company’s products.\textsuperscript{16}

Sometimes, interactions with KOLs and their audiences cross the line into illegality. The US Department of Justice has accused the company Novartis of running ‘sham’ speaker sessions for some hypertension and diabetes drugs, where the goal was more to wine and dine doctors, perhaps including the speakers,
than to educate them. In 2017, the company was ordered to turn over records for 79,200 events, including for dinners costing many hundreds of dollars per person – and in a few cases thousands of dollars, as in a $9750 dinner for three at the famous restaurant Nobu in Dallas in 2005.\textsuperscript{17} The events included dinners and drinks at restaurants unlikely to be among the best venues for standard medical education, like Hooters, known for its revealingly dressed young female servers. The lawsuit claims that at many occasions it was ‘virtually impossible for any presentation to be made, such as on fishing trips off the Florida coast’.\textsuperscript{18} The events even included multiple dinners where the same group of doctors would meet repeatedly to hear the same speaker give the same presentation!

A few companies may have hired speakers in direct trade for prescriptions. In a legal case against Insys Therapeutics, maker of the fentanyl product Subsys, former sales rep Tracy Krane describes an early ‘ride-along’ training session with the company’s director of sales, Alec Burlakoff. Burlakoff told Krane

> that the real target was not the audience but the speaker himself, who would keep getting paid to do programs if and only if he showed loyalty to Subsys. It was a quid pro quo or, as the Department of Justice later called it, a kickback. ‘He boiled it right down’, Krane recalled: We pay doctors to write scripts. That’s what the speaker program is.\textsuperscript{19}

Although speaker bureau events are sometimes shams, and are sometimes held over good dinners in fine restaurants, ‘gone are the days of all-expenses-paid trips to the Dead Sea, complete with sumptuous banquets, luxurious Bedouin tents and belly dancers’.\textsuperscript{20} Just to be clear, the banquets, Bedouin tents and belly dancers are not embellishments, but were features of actual educational events. There was a period, peaking in the late 1990s, when no extravagance – and no level of crassness – was unthinkable where blockbuster drugs were concerned.

KOLs today draw contrasts to those bad old days: ‘In the past there was so much excess spending on doctors that it was repugnant – people thought it was unethical’, says Dr Kramer. But for some doctors, like Dr Koren, the pendulum may now have swung back too far:
So I do agree that in the past it was a little excessive and there was probably too much influence in a negative way but now I think it's the other way around – it’s stifling innovations and when I meet, you know, I’ll be honest, when I meet doctors who refuse to attend any promotional events they honestly are usually the ones that are the least educated about products in our field.

Younger KOLs manage to both regret and respect the changes:

I’ve never had the opportunity to go to a Chicago Bulls game or you know being taken on a trip or anything of that sort. … I know that’s happened in the past where um … they would come up with these kind of bogus reasons then pay for entertainment or whatever. … I think there’s really no place for that in our profession. (Dr Khan)

Since new regulations have reined in pharmaceutical companies’ efforts to influence practitioners and researchers through generous and frequent gifts, lavish travel and more, those companies’ current efforts through more transparent or more subtle mechanisms seem relatively innocent.

THE RESEARCHER KOL

Establishing Relationships

Drug companies identify most of their researcher KOLs quite differently. Because the companies want larger and larger numbers of KOLs, independent firms have arisen that specialize in identifying and managing relationships with them. There are dozens of companies that identify, map the influence of, recruit, and manage KOLs internationally; many more focus on national or regional markets. A major example of such a firm is Thought Leader Select, which advertises multiple services for identifying, mapping, and planning engagement with KOLs, including ‘Thought Leader ID, Thought Leader Impact, Thought Leader Engage’.21 Other companies describe overlapping services and skills. Some tout their sophisticated use of social network analytics, citation analysis and other scientometric tools.22 Others focus on KOL relationship management, and have
proprietary software systems for planning and tracking interactions. KOLs are key to successful pharmaceutical marketing, so all of the work of engaging and engaging with them makes for a sizeable amount of business.

Research is highly valued in medicine. Therefore, many doctors enjoy and seek elevated status by participating in research. Being a physician KOL can develop into becoming a researcher KOL: ‘Anything that, you know, puts you in front of people gives you the opportunity to enhance your professional status’ says Dr Kourakis, a physician KOL with a research profile. Some research KOLs are developed through years of interactions. For example, Dr Kessel, with whom I introduced this chapter, spent many years giving promotional talks, speaking from company slide sets. As he became established as a researcher, he continued to give talks for drug companies, but they were generally scientific talks. He gradually changed from a well-connected and thoughtful physician presenting other people’s data, to a research scientist presenting his own. Physician KOLs can graduate. All along the way, they are helped along in their increasing influence by the platforms, networks, and resources their sponsors offer them. But by the time they are researcher KOLs, they have also established their own reputations. They have attained a certain amount of independence from individual drug companies, because their own status is in demand.

Medical presentations in universities usually begin with speakers making statements about their conflicts of interest. Sometimes, those conflicts number into the dozens. A medical researcher told me that while people outside medicine – like me – would look askance at a presenter with a large number of conflicts, a standard thought inside medicine is: ‘I wish I were like him.’ Drug company connections represent money, status, perks and upward-looking careers. Through these connections, physicians and medical researchers can become ‘players’ in their areas. Conflicts of interest, for many in medicine, can be disclosed, handled and used.

So, for researcher KOLs, relationships with drug companies offer more than payments for advising and speaking. Most prominently, the companies offer research support to their more valuable contacts. Sometimes this comes from companies proposing trials that they want done, and offering research roles and expected authorship. As we saw in the previous chapters, KOLs may even be
offered authorship on ghost-managed company manuscripts, another relationship that serves both sides handsomely. Because of the commercial importance of having the right sort of author, publication planners find KOLs willing to put their names at the top of articles. This allows planners to make it seem as if the articles are by independent researchers, instead of by coordinated corporate teams. KOL authorship increases the perceived credibility of an article and also functions to hide features of the research process.

Relationships are built over time, beginning with the early stages of development of a new product. As their names suggest, advisory boards and consultancies allow companies to benefit from outside expertise: consultants and advisory boards help develop R&D plans as well as marketing plans. But they also allow companies to pay physicians, and to develop relationships with them. According to John Mack of Pharma Marketing News, ‘Pharmaceutical companies view KOL advisory boards as the first and most influential activity in thought leader development’ in the context of a plan for a new product, and ‘Companies that assemble KOL advisory boards early in the product development phase stand to benefit by forging long-term ties with these experts’.

Overall, enrolling allies is a more important function of advisory boards than is collecting advice. A pharma industry consultant, Mr Lange, explains the function of advisory boards through a story:

One of the things with a couple of investigations and ad [advisory] boards in particular is they have the ad board, it’s got a great agenda, the minutes are taken, and nothing happens. They ask, what did you do with the minutes of the meeting? Around here somewhere. We looked in the file cabinet, found them later on, blew the dust off, nothing is ever done. Then they run the same ad board again, [pause] and again. And they run it on a quarterly basis and then they run it on both a regional and national level and same results happen with the results. They’re in the file cabinet.

Or they may not even be in the file cabinet. A former sales representative describes how she would promote drugs by hiring physicians to serve as consultants, asking them to provide expert advice on marketing presentations:
At times, attendees were paid an ‘honorarium’ to act as marketing consultants and just ‘listen, give feedback and fill out a piece of paper’. This information was thrown away when the checks were handed out.\(^{25}\)

We can see another hint of advisory boards’ role in developing allies in a warning from the European industry compliance expert Ms Linder, explaining the risk that payments to sit on advisory boards might be seen as payments to prescribe:

> There’s got to be a legitimate [need] for the services. Where we have issues, it may well be that there are too many advisory boards. You don’t need 30 advisory boards when you’re looking at a particular part of a new product, perhaps. Or perhaps there might be reasons as to why you need that many, but you need to be able to justify it. It’s always useful to prepare your defence before you go down this path, I think. And certainly if you’re involved with key opinion leaders.

We saw the danger Linder is concerned about earlier in this chapter, in the form of criminal charges against Insys Therapeutics and Novartis.

**Spreading the Word**

Like their physician counterparts, researcher KOLs are used to influence physicians and researchers. They are paid to speak. They are paid to deliver continuing medical education courses, to give talks to specialists and other important physician groups, and to present at workshops and conferences – and even sessions for other KOLs. For these important talks, the honoraria are $2500 or more,\(^{26}\) as opposed to the $500 to $1000 paid to most physician KOLs for their presentations. According to industry analysts, drug companies spend 15-25% of their marketing budget on speaking events.\(^ {27}\) ‘Sunshine’ laws in the US and Europe require drug companies to publicly reveal how much they pay to physicians.\(^ {28}\) Earlier reports, on the basis of legal settlements and earlier versions of these laws, show that some physicians can make huge sums of money: they can earn amounts up to several hundred thousand dollars in speaking fees in a single year.
A number of governments are in the process of regulating payments to physicians, lowering payments to the level of ‘fair market value’, however difficult that is to assess. Fair market value is a constant topic of discussion at industry conferences on KOLs, and there are entire industry reports devoted to it. The topic is important not because companies want to pay less – quite the opposite – but because they want to avoid legally dubious payments that might be seen as inappropriate influence or even bribes.

Although researcher KOLs do not engage in the direct sales/promotion activities of their local counterparts, they influence prescribing both directly and indirectly. According to InsiteResearch, 70% of the US specialists writing the most prescriptions were ‘directly or indirectly related’ to the top five opinion leaders in that specialty. Promotional and educational material may also be built on research or studies executed or authored by KOLs. And, of course, KOLs can influence physicians with whom they are not already related, both by speaking to them directly, and also by affecting the medical knowledge landscape in their areas.

Continuing Medical Education

Although many physicians treat all talks by KOLs – whether explicitly promotional or not – as educational, in most places a formal level of continuing medical education (CME) exists in the form of small courses that physicians must take to maintain their accreditation. CME is supposed to be independent of corporate interests – so industry sponsors are not allowed to control the course content. For pharmaceutical companies, this is the best kind of marketing: directed at receptive audiences that need to educate themselves, and provided by sources the audiences have reasons to trust.

The independent agencies that run most of these courses are typically allowed to provide administrative support, pay for speakers, help speakers prepare their talks, and provide entertainment for participants. In 2012, commercial support for CME (including advertising and related income) in the US accounted for roughly 40% of income for accredited CME providers (a considerable reduction from a few years earlier).
Accredited CME providers are subject to regulation, the most important aspect of which is that sponsors such as pharma companies may not control the content of courses. In the US and Canada, though, pharma companies can provide funding for CME, help organize the courses, pay for KOL speakers, help them prepare their talks, and provide entertainment for participants. In some cases, even fully independent bodies may invite pharma companies to influence content: for example, one letter by a Canadian medical association soliciting funds for a CME conference stated that ‘major sponsors will be given the opportunity to nominate participants to represent the industry’s interest and to participate actively in the conference’. In theory, though, the company must allow speakers complete freedom when it comes to the actual content.

For pharmaceutical companies, it is only a modest challenge to align KOLs with their own interests when it comes to CME. If providing logistical, scientific and financial support is not enough, companies have further methods of orchestrating CMEs indirectly. If the sponsors have chosen their speakers well, supported the research of these speakers, and given them templates and slides for their talks, the courses will convey the preferred messages.

The companies attempt to carefully manage their KOLs, their promotional talks, and their contributions to CME. At the very least, those talks tend to strongly endorse the sponsors’ products. As one medical education and communication company advertised: ‘Medical education is a powerful tool that can deliver your message to key audiences, and get those audiences to take action that benefits your product’. Both promotional and CME talks, then, are part of pharmaceutical companies’ promotional campaigns. Any education their talks provide and any health benefits that result from them have to be understood as shaped by the sponsoring companies’ interests. According to an industry education specialist, the ideal for CME is ‘control – leaving nothing to chance’.

**Facilitating Regulation**

KOLs can smooth the path to acceptance of diseases and drugs. Jennifer Fishman describes how researchers on female sexual dysfunction acted as mediators
between pharmaceutical companies, the US Food and Drug Administration (FDA), physicians, and potential consumers. For example, in 2001, researchers ran a consensus conference on ‘Androgen Deficiency in Women’, designed to establish the definition of and diagnostic criteria for this developing disorder. The conference was paired with a CME course, to communicate the issues more broadly.\footnote{35}

The ‘Androgen Deficiency in Women’ conference was supported by grants from several companies that were developing testosterone products for women, and was important to the prospects for success of these products, because the FDA only approves drugs that treat established medical disorders. The conference’s consensus document, then, was a key step in establishing the regulatory legitimacy of female sexual dysfunction in the form of ‘female androgen insufficiency syndrome’. In addition to looking at documents, the FDA turns to researchers like the conference organizers and participants in order to judge the documents: these KOLs have the expertise to contribute to the agency’s decisions.

Generalizing the above points, the firm InsiteResearch claims:

> Interacting with qualified investigators, physicians experienced in regulatory reviews, well-known and respected speakers, and highly published authors will help to efficiently manage tasks within the critical path of the product and disseminate the message of the product to the end prescribing audience.\footnote{36}

The companies draw on KOLs’ influence in a broad variety of contexts, and also put them in better positions to have that influence, making them better KOLs. A director of medical science liaisons for a small drug company, Ms. Mandel, lists the functions and ‘touch points’ for high-level KOLs in her company: ‘advisory boards and scientific summits, internal training, consultants, publications, media activities, speaking at local and national meetings, congresses, peer-to-peer communications, patient communications and education, and policy, advocacy and social media activity’. In this company, KOLs are asked to serve in a wide range of important outreach roles.
Ms Monroe, a senior manager of medical science liaisons (MSLs) at a mid-sized drug company, emphasizes that MSLs must have goals in all of their interactions with KOLs:

When you go in, that might be your goal, your objective, is to just continue to develop that relationship. And that’s OK. It’s just that at some point you need to expand on that goal. … At the end of the day we do want something from them. … We have needs that need to be met by KOLs, on the medical affairs side.

Ideally, interactions between MSLs and a KOL should be part of a general ‘KOL management’ plan. That said, those people in charge of KOL management recognize that that term suggests a one-sided relationship and might suggest that the primary use of KOLs is to market products. Even though the goal of managing KOLs is to make scientific knowledge about products and diseases more widespread, and thereby to market products, the people who engage with KOLs tend to be committed – in their public statements – to an ideal on which KOLs are independent. KOLs are typically portrayed as communicating scientific information. For example, Ms Mathis, who works for a large company, explains:

Particular [sic] as you start to enter Phase I, Phase II, and you know these molecules are moving along, it looks to have some promise, okay there are unique aspects perhaps about the mechanism of action, it’s going to be very important to help start to educate the community, the physician community, the patient community, the professional societies on this mechanism of action on the disease state itself.

Let’s return to Dr Kessel. In one of his talks as a representative KOL, he described how he once saw, inadvertently, an ‘individual management plan’ tailored for him, which was normally kept under lock and key within the company. It included such entries as ‘so-and-so will meet with him on such-and-such a date with this
expected result, and then we’ll invite him to do this’. Needless to say, Kessel found this somewhat offensive. He objected to being managed, saying that he and his colleagues wanted to be treated as partners in the drug companies’ work rather than as mere tools.

After Kessel told this story, the response from the audience was to look for another term, avoiding ‘management’. A director of MSLs suggested ‘opinion leader engagement’. Ms Laird, a consultant who had formerly worked for a large drug company, suggested that they talk not about managing KOLs, but about ‘managing relationships with KOLs’. (At a similar juncture one year later, Ms Laird dropped the ‘KOLs’ in favour of ‘stakeholders’, wanting to incorporate KOL relations into larger company plans for stakeholder relations, including patient groups and others. However, Laird’s model of stakeholder relations remained very similar to standard models of KOL relations.)

Mr Chaudhary, a senior marketing director for another major company, suggested that they think in terms of ‘managing experiences’. Mr Maxwell, the head of Medical Affairs at a small company, sees KOLs as part of a broad ‘coalition around a drug’, a coalition that can also involve advocacy groups, non-profits, and other companies. Coalitions involve genuine collaboration, and Maxwell is right in this, because the relationships aren’t merely unidirectional or unidimensional. The companies want to influence these influence leaders, but they also provide incentives to them and sometimes want to learn from them.

If the coalition metaphor works, then relationships with KOLs extend the company beyond its formal boundaries. This theme was echoed by other commentators on KOLs: Mr Marchese argued that building a KOL network is ‘building an armamentarium of expertise’ outside the company. Mr Chaudhary spoke of KOLs as part of companies’ ‘activation networks’ for particular products. In this way of seeing them, KOLs are agents whose interests have been aligned with those of the companies, enabling an extension of action to new domains. 37

Most of these people quickly fell back on the familiar, older term, as developing and implementing KOL management systems was a central topic of the meeting. And they never suggested that any activities needed changing. 38

Though there may be efforts to move away from the instrumentalism of terms like ‘KOL management’, influential physicians and researchers are enough of a
resource that, as I pointed out above, there are firms that provide lists of KOLs for drug company projects, design KOL management plans, integrate those plans with publication plans, and will even train KOLs in public speaking, so they will deliver more effective lectures. The term ‘management’ is exactly right, suggests InsiteResearch in an article for the magazine *Next Generation Pharmaceutical*. Drawing on a dictionary definition, the firm argues that management should involve ‘handling, direction and control’ – precisely what is needed to make KOLs effective. It goes further, claiming that a holistic programme is one that incorporates the total spectrum of experts including advocates, non-advocates, or those which are neutral. It is best to engage as many experts as possible with various programme activities even if those activities are to neutralize a non-advocate.

The distinction between non-advocates and advocates is a telling one. Mr Magyar, a director at a major medical device company, speaking to an audience of mostly pharmaceutical industry MSLs and managers, says:

> How often do you have an anti-opinion leader of clinical trials that get released, and you have an anti-opinion leader outfit that undermines the validity of the trial or its meaning or its relevance. You don’t have any control really on the anti-opinion leader, you only control the opinion leader and it’s a critical role.

He goes on to say that it’s an enormous challenge to ‘really cut off those anti-opinion leaders that are out there’. The term ‘anti-opinion leaders’ firmly shows that, for Magyar, the only real opinion leaders are the ones who can be in companies’ control.

Magyar doesn’t explain concretely how to ‘cut off’ non-advocates, but there are well-known cases; for example, Dr David Healy describes systematic efforts to challenge and silence critics of anti-depressants. A company’s control of opinion leaders can neutralize opponents and make sure that clinical trial results receive the company’s preferred interpretation. John Virapen, a director of a large company’s operations in Sweden in the 1980s, describes a quid pro quo arrangement with one opinion leader:
He was only activated if there was bad press about us and our products. Unexpected side effects, impure substances, ailing patients; that was bad press. He promptly wrote positive articles about us in medical journals – the medical fraternity was pacified and could continue to receive our reps unreservedly.41

The opinion leader was paid with a substantial cheque, hand-delivered to him when he was on a trip outside Sweden, so that no connections could be made between payments and his articles.

When done correctly, KOL management should spread knowledge and change opinions and prescribing habits. It should produce a good return on investment, although this is impossible to measure – a point much lamented by people who put together and work in MSL programmes.

To take a different look at the preceding two chapters, publication planning engages in another form of KOL management, though it is focused more on scientific content than relationships. It presents itself as being in the service of developing and disseminating scientific knowledge. Tongue in cheek, industry consultant Ms Lane asks her audience of publication planners: ‘By the way, is anything you do ever used in a promotional context? Oh yeah!’ On its website, Watermeadow Medical says that ‘We’ll ensure your products and markets are thoroughly prepared, supported by persuasive and professional communications.’ Their services include ‘developing all types of manuscripts, such as primary manuscripts, secondary manuscripts, review articles, letters, editorials and proceedings supplements, as well as abstracts and posters’.42 All of these different marketing vehicles need KOLs.

Unlike their physician counterparts, independence is key for the status and effectiveness of researcher KOLs. Mr Leone, a consultant to the industry, asks a conference on KOL management, ‘With key opinion leaders and thought leaders, what is the single most important asset you work with? Credibility.’ These researchers are useful to the companies largely because they are not company employees. Presumably, a KOL who appears to be just an arm of the sales force will quickly lose status, and hence effectiveness, among his or her peers. Both the possessors and the possessed value the appearance of independence.
For this reason, part of KOL management is somewhat ghostly. The KOLs themselves probably do not see all of the ways in which they are managed by drug companies, because this management often happens through more subtle tools than money. They are engaged in ways that further their careers while also furthering company interests. Most of the time, that involves scientific research: performing it, communicating it, or taking credit for it.

When they give talks, KOLs contribute to the enormous influence that the pharmaceutical industry has on medical knowledge. The promotional talks and CME courses in which KOLs participate are thoroughly shaped by the interests of the companies that sponsor them. What is communicated will often be sound medical science, which is why KOLs are willing to communicate it; nevertheless, it will be science chosen to help sell a product.

JUSTIFICATION SCHEMES

As a whole, medicine is conflicted about its interactions with the pharmaceutical industry, and many individual physicians are also conflicted. This conflict, though, doesn’t deter KOLs from interacting with the industry in a range of ways, most of which involve presenting pharmaceutical companies’ data, arguments, claims and views. What do they say about their interactions with industry? How do they rationalize those interactions? What makes exchanges with companies acceptable or unacceptable to KOLs? Do they understand the extent to which they are being controlled? Do they care?

With questions like these in mind, I arranged for interviews with fourteen KOLs, all of whom had been paid more than $100,000 by different pharmaceutical companies in a single year. A research assistant, Zdenka Chloubova, who is much better at this than I am, did the interviews. Here, I focus on the most prominent things these KOLs said to justify and explain their positions.

As it turned out, we didn’t need to directly ask these KOLs how they justify their work with the industry. Once they started speaking, they all answered our questions without our having to ask them. In a similar study, the anthropologist Emily Martin interviewed sales representatives and marketers. Martin was interested in how her interview subjects reconcile their sense of their own
personal integrity with an industry vilified as ‘rapacious and profit hungry’. Exactly matching the experience with KOLs, she writes that ‘[n]early every person I interviewed spent considerable time, without much prompting, telling me what makes their work meaningful to them and why’.\textsuperscript{65} Clearly, the problem looms large in the minds of many people working for or with the pharmaceutical industry.

\textit{Money}

There is no question that money is a central reason why physicians give talks for pharmaceutical companies. However, Dr Kramer is one of the very few interviewed KOLs who openly admits it: ‘Well, I enjoy doing promotional talks and I actually try to do education, but when it comes down to it it’s really about earning extra money.’

One of the ways that highly paid KOLs downplay the role of the money is to acknowledge the income, but to emphasize how reasonable it is or how it fits into their lives. ‘You know, my kids are grown up … I use a lot of the income to support my parents’, says Dr Kourakis. When payments come up, so do fairness and appropriateness; these KOLs want to deny that payments are anything other than what they seem. ‘We’re paid well. But we’re paid I think fairly’, suggests Dr King. Time spent giving talks replaces time in the clinic, and they all give the impression of being successful practitioners, so they expect to be appropriately reimbursed. Dr Khan spells out the fairness more fully:

\begin{quote}
It would be ridiculous to say that the money was not relevant, of course the money was relevant. You know, I got paid very well to give these talks. But on the other hand, I think what I was paid for giving talks was absolutely fair market value when it comes to you know transportation to the talks, giving, transportation from the talks, taking time out of things that I was doing, you know like potentially seeing patients during the time, etcetera.
\end{quote}

KOLs also sideline the role of the money they receive by mentioning the other rewards of giving talks. These include increased recognition or status, networking
with other physicians, the possibility of gaining referrals to their practices, future opportunities for benefits from the companies for which they speak, learning about new products, being at the vanguard of their practices, and simply the enjoyment they get from speaking and teaching: ‘The main reason was just, I really enjoyed [giving talks],’ insists Dr Khan. For example, many note with pride their abilities as teachers or speakers, in the way that Dr Kramer remarks how flattering it is to have that recognized:

So I got picked up as … a disease state educator and then everyone became so interested in my teaching ability that I became a promotional speaker and you might imagine, since you’re doing this research, [the] promotional speaking thing really took off and now I have, every company that I know of is texting me to be a promotional speaker.

Being a KOL puts physicians in private practice at the apparent leading edge of medicine. Dr King communicates the excitement of this:

So here I am in a room with you know maybe fifteen people where thirteen of them are all the guys whose papers I read or people who are doing cutting edge research in sleep and then me … who’s in private practice. So that kind of opportunity to sit there with these really smart guys and learn from them and help me know more about sleep and help me be a better doctor to my patients which is one of the things that I really get a charge out of.

KOLs understand, though, that their work for pharmaceutical companies also creates a potential threat to their reputation and self-esteem. As a result of a sales rep asking an industry KOL to speak with a particular physician after a lunch talk, he found himself ‘literally standing in the drug rep spot begging for a minute of this doctor’s time, like a cocker spaniel begging for a leftover piece of meat from the table’. He promptly quit speaking for the industry.46

It’s likely that most outsiders and many physicians would have a negative view of speaking for drug companies, at least when they think about it in the abstract. For Dr Kirk, ‘the number one reason not to do a promotional talk is
that it could possibly tarnish one's reputation ... if there's an appearance that my interest in earning money or in promoting a drug and being a sales person outweighs my clinical expertise'. Sunshine acts in Europe and the US are premised on questions about integrity. Dr Kane: 'So now my name ... is able to be published on the front page of the paper with how much money I made, you know, doing this many talks etcetera, etcetera. So it's a matter of public record ... making out the clinicians to be sort of selling their souls.'

As one might expect, KOLs are concerned about defending their integrity. They take affront at any suggestion that they might be less than independent, failing to present the truth as they see it, or doing anything else questionable. 'You're not just a paid monkey reading slides', insists Dr Kane. '[I won't] be a paid stooge for somebody', avows Dr Koren. Giving talks for companies 'doesn't mean you're a paid shill of the company', says Dr Kourakis. 'I'm not for sale', Dr King bluntly claims. And because of their concerns about integrity, they provide some public-spirited reasons for giving paid talks for the industry, mostly to do with educating other physicians and helping patients.

**Providing Education and Promoting Health**

The KOLs we interviewed take pride in their teaching, and teaching is how they frame even promotional talks. 'I am educating fellow physicians. I spend my day educating patients, I spend some of my evenings educating fellow physicians', explains Dr Kourakis. These KOLs all invoke education as a reason for speaking on behalf of companies, even when they are doing purely promotional speaking. They are divided about the value of promotional versus formal CME talks, but they always see themselves personally as engaged in important teaching.

With public institutions not providing much continuing education for doctors, Dr Kirk looks to pharma: 'I believe that the majority of funding [of] professional education is promotional which I think is not very helpful and really truly the thing that I think is the biggest flaw in promotional education is not that it’s promotional, it’s that you are limited to what’s in the label.'

Dr Koch, though, finds promotional talks more educationally valuable precisely because they are more tightly regulated and focused:
Based on my very direct experience, quite frankly, the CME lectures which everybody espouses as being appropriate interaction[s] ..., can be the most biased presentations of any you’ll ever see given – and you don’t ever trace back the funding for the CME group to the couple of companies giving the vast majority of the money to one of those speakers bureaus. So while CMEs are given a veneer of legitimacy they actually can be very dangerous to the public educational experience.

Dr Keith is much more critical of the industry, and especially of its role in promotional talks, though he gives them regularly. ‘The reason for giving the promotional talks is to help the company sell its drug – I mean that’s basically – that’s what a promotional talk is.’ Dr Kramer echoes this point, but manages to find educational value despite the problems. ‘The honest answer is that promotional talks are not really for educating so – and I give plenty of promotional talks – ... but some speakers are better than others at bending it into an educational talk.’ Kramer is, as I mentioned above, the most forthright about speaking to earn money. So, he is not exactly a cynic, though he is mercenary.

Very closely related to education is the presumed goal of improving health outcomes for patients. Discussing his KOL work, Kourakis enthuses, ‘Oh, it helps other patients elsewhere, it’s spreading the word – it’s spreading the gospel.’ It is a particularly effective way to help patients, as King observes:

It also gives you the ability to sort of extend your impact. I mean in the office, I may see 20 patients a day. But if I’m out at a talk and if I’m talking to 20 or 30 primary care docs and if I help them be better at treating a certain disease state then I’ve sort of extended my potential impact that way.

**Integrity**

The ability to portray their work in terms of education and helping patients depends in part on KOLs’ ability to counter charges that they are merely paid company stooges. Almost every one of the KOLs interviewed said forcefully and without prompting that they believe in the products they promote, declaring
their integrity and their independence from the companies and the payments they receive:

If I don’t believe the data, I won’t do it. If I don’t think the agent … has a real role or a real niche, if it’s not one I’m supportive of, then I don’t do it. If I feel the drug company is pushing a sales pitch more than a proper therapeutic use, I won’t do it.

For evidence, they point to their own prescribing patterns and habits:

I believe in the product that I recommend and won’t say anything that is untrue. Drug talks are a simple way to increase my visibility with my peers as well as earn a few extra dollars recommending a product that I routinely recommend to my patients multiple times a day.47

In extreme cases, evidence is even closer to home, as when Dr Kourakis says: ‘My mother and father are on a lot of the drugs I speak for. I think they’re terrific. So, I am not putting my parents on it because I am speaking for the company – it’s the best drug’. And believing in the product can go as far as feeling strongly about its value. Dr King claims: ‘I’d have to feel sort of passionately about it in order to do a good job as a speaker, and I don’t want to be a speaker if I don’t feel like I can do a good job for them.’

It should be said that a number of these physicians mentioned how at least a few other KOLs tied their own prescriptions to company perks, including speaking. In our interviews there were some half-dozen mentions of other physicians who demanded speaking engagements in exchange for prescribing a company’s product, or sales representatives who offered speaking engagements in trade for those prescriptions.48 But Dr Knapp speaks for all of his fellow interviewees when he says, ‘the vast majority of doctors and pharmaceutical reps that I know are very ethical and really never did anything like that and certainly I was never party to anything like that.’

However, there are at least three ways in which KOLs’ sense of their own integrity fails to address important political and epistemic issues to do with their
work for pharmaceutical companies. First, the companies go to some lengths to gain control over the actions, habits, beliefs and loyalties of KOLs with whom they engage. KOLs are fully managed, and so is their sense of integrity. Indeed, KOLs’ appearance of independence and integrity even helps the companies to achieve their goals. Second, even if those companies did almost nothing to co-opt KOLs, there would be lingering issues about conflict of interest: KOLs are often very well paid, and it’s difficult to imagine that that wouldn’t affect them. Third, pharmaceutical companies pay KOLs to be conduits of information. The companies’ preferred KOLs are doing the circulation and the companies’ preferred information is being circulated. The companies’ enormous resources can disproportionately influence medicine.

CONCLUSIONS: CREATING KOLS

KOLs are recruited, trained, developed, engaged, and deployed by drug companies and their agents. Those companies’ interests are almost always close by, at stake in every interaction. To their audiences, companies’ interests are either partially obscured (in promotional talks) or entirely hidden (in ghost-managed CME and conference presentations, journal articles, and other kinds of actions) by the KOLs’ mediations.

Successful physician KOLs don’t need to be opinion leaders before beginning to work for drug companies. At this level, KOLs only need the ability to become good speakers, and the ability to maintain their status as insiders to physician communities while delivering presentations prepared by the companies. The idea of the opinion leader articulated by Paul Lazarsfeld and his students in the 1940s and 1950s is not actually very similar to the one enacted in drug companies’ current practices. Whereas Lazarsfeld found opinion leaders in existing social networks, the drug industry creates KOLs for target audiences.

This difference is interesting, and to explore it further it’s worth going back to the original Columbia University work on opinion leaders. Christophe Van den Bulte and Gary Lilien revisited the data set for the research that Pfizer paid for in the mid-1950s, research that introduced the idea of opinion leaders to the industry. Van den Bulte and Lilien argue that the study never actually provided strong
support for the ‘social contagion’ model centred on opinion leaders. Moreover, it failed to consider the effects of advertising. The Columbia researchers were already focused on opinion leadership, leading them to ignore the advertising and sales representatives who were promoting tetracycline. While Pfizer itself was not heavily advertising tetracycline, its competitor Lederle, which had been the first into the US market with the drug, was. Van den Bulte and Lilien introduce ‘advertising volume’ as a variable, and find that it had a significant effect. And once this variable is introduced, there is no significant social contagion effect in the data. It appears that US physicians started prescribing tetracycline in the early 1950s more because of advertising than because influential members of their social networks were prescribing it.

This reanalysis suggests something interesting. Drug marketers picked up the work’s central term, ‘opinion leaders’, and perhaps more. The industry’s development of a whole set of practices around opinion leaders, then, starts from a piece of research that showed only weak influence of medical opinion leaders at best, and may have been more seriously flawed. So, how can we understand the industry’s investment in this model, and its apparent success?

The drug industry has the resources to facilitate career advancement. It offers opportunities for ghost-managed presentations and publications, and audiences for both. Physician KOLs speak to audiences of colleagues assembled by sales representatives, and are paid handsomely to do so.

Before their deployment, most physician KOLs aren’t pre-existing opinion leaders, at least not for all of the audiences to which they speak. They aren’t physicians who are already influential or who have a place in a social network that would allow them to be influential. But drug companies’ hiring of them makes physician KOLs influential. They are networked with other physicians, turning them into important social nodes. In an important sense, then, drug companies turn people into KOLs by providing the right training, resources, and venues to make these physicians influential. Even if local opinion leaders didn’t have much of an effect in 1950s medical practice, they do now. With the industry’s support, the opinion leader research was a self-fulfilling prophecy.

Similar patterns apply to researcher KOLs. First, the companies hold valuable resources for boosting researchers’ reputations and status. Over the past fifty
years, the pharmaceutical industry has become the largest funder of medical research in dollar terms. Although most of that industry funding goes to contract research organizations and biotechnology firms, the total volume of industry funding is still very attractive to academic medical researchers. Second, even without research funding, publication planners make KOLs their authors on articles, and their speakers at conferences, workshops and other events. In so doing, they build reputations, turning people into ever more influential opinion leaders. As long as they maintain the appearance of independence from their sponsors – and perhaps even when they don’t – their talks increase their prominence. Repeatedly being billed as a leading expert can give a person the status of leading expert. Dr Katz realizes this when he wonders why he agrees to give talks: ‘When you’re being asked to be the thought leader, that’s a bull’s-eye exactly where academics live. They want to be thought leaders.’

A model of the social world can have effects, when participants align their behaviour with the model and then change the world to fit the model’s description. Belief in the truth or value of the model leads people and institutions to invest in it, and to reshape the world around it. 51

Turning people into opinion leaders has allowed the industry to change the social landscape of communication in medicine. In the same moves as the industry provides audiences and builds the careers of physicians and researchers, it contributes to hierarchies of influence. Scientific presentations in clinics and at dinner events have become ordinary, and are common ways of communicating information, presumably contributing to the formation of opinions. Conference and CME presentations by research stars and rising stars are equally ordinary. Reprinted journal articles by those same stars are given to physicians in large numbers. All of this communicated science represents the most highly valued information, information that forms the basis of many opinions. Whatever the structure of opinion leadership among 1950s US physicians, the drug industry has now firmly established the social contagion model wherever it works with KOLs.