

Drugs, Keys and the Latest Fix: An insight into Medical Communication

Dr Safeer Mughal (Scientific Writer, Parexel International)

Hi guys, as Chris said my name's Safeer, thanks for coming, and thanks for the invitation. This is going to be an insight into medical communications, known as MedComms for short. Drugs, keys and the latest fix. Of course, by drugs I mean therapeutic pharmaceutical agents. By keys, the main tools of the trade which is going to be a laptop and a keyboard and the latest fix, by which I mean agents, drugs and other products which are right at the cutting edge of medical science.

I'm going to start off by letting you know what medical writers do. I'll tell you about a typical day in the job and then give a little bit more insight after that. In very basic terms, MedComms is about taking very complex scientific and medical information, digesting that and put it back out in more accessible and motivating pieces. There's a really, really wide variety of stuff that we'll produce. I'll talk a little bit more about the different types of articles we produce in a minute, but they include abstracts, digital media, we do a lot of congress materials.

There's a variety of audiences that you might be producing stuff for, but the main thing is that you will be communicating this science to healthcare providers, healthcare professionals, doctors, nurses, anyone like that. It might be that you are informing doctors and other healthcare professionals about current developments in a disease area or there might be a specific product that you want to bring to their attention on behalf of your client. We also provide strategic insight for clients, letting them know what kind of publications they should be producing, when and what kind of messaging they should be putting across. We offer a range of different specialists – we have scientific people like myself, we have studio people, we have design specialists. If we don't have someone in house we have plenty of contacts to put towards the client to help, so it will be quite a nice integrated process. The bottom line is we deliver quality materials, on time and on budget. This is quite a different environment from my experience in an academic setting, there is much more need for business thinking that I was involved in doing my PhD.

Our major clients are pharmaceutical companies and the biotechnology industry. That's not always the case, but it would be generally true. In some senses MedComms is like a support network. We support industries so that whenever they've got new drugs to a very promising stage – say phase II or phase III of a clinical trial, when they look like they are very effective, that they're genuinely quite safe as well, it's then that they want to start communicating the data and product information, to promote their drugs to doctors. They want to start getting the word out to gain an interest in their product. So we will help them to communicate a lot of that heavy scientific data on their drugs and their products, effectively translating it for different audiences.

As a writer I've had a good range of experiences. I've had the opportunity to work on we write high quality scientific copy on many different therapeutic areas and in many different formats. The variety of what you are working on is brilliant. It's never the same thing; it's always constantly evolving and constantly changing.

Some of the work involves contact with doctors who are really the leaders in their field worldwide. It might be that we are trying to tell them about something new, but we also contact them for their advice about things. For example, we might be saying "ok, this is what we've got, how should we be talking about this, what's the best use of it?" It's a two way process depending what type of projects you should be involved in.

You've got to be tailoring material to your target audience. They might be primary care doctors, specialists in one field or it might be nurses. Sometime we can be writing materials directly for the patients themselves, all of which adds to the variety of what you're doing. It may be that the last time the patients thought about science was doing their GCSEs twenty years ago, or when they last watched The Big Bang Theory. Sometimes the intended reader is a non-scientist member of the project team themselves.

A company like Parexel can be involved at a variety of stages, in different ways. We offer branding and creative services. We can provide communication strategy and planning, helping the client to understand the best way to communicate about their products, about the kind of messages to give, for example how it relates to their competitors, and when to give them. Sometimes we actually help to draft papers for publication in scientific journals. As I said, we also get to identify and engage with these topshot doctors.

Another side of MedComms involves attending a lot of meetings. They might be big symposiums or congresses, conferences. You might be helping the client to have a presence at those congresses, producing materials to support any presentations they might be giving about the work. We can be involved in putting the material together and in coordination.

Over the past year I've also been involved in developing e-learning resources and digital media. I've been doing some work making videos with doctors, including writing scripts, discussing it with them and being on hand during the actual filming to make sure it is accurate. We're also experimenting with some more interactive ways of presenting data.

I've talked about meetings and events when we discussed symposium stuff. Then there's "competitive intelligence". That's the role we can play helping clients to keep up to date with what their competitors are doing, so they can tell if they are in line with others, ahead of the curve or so on.

What's it actually like on the job? It is important to realise that there's a significant amount of teamwork involved. You don't just write something on your own. If you were writing something you'd draft it up, then you'd pass it to someone else to look over it for the scientific content, then you work back and forward to get that right. Then you pass it over to someone on editorial and get that finalised. Then you agree it with the client, and if they are happy pass it to someone in design. So there's a whole network of passing documents back and forward to produce the best quality content. It's quite a wide and varied team, so the relationships you build in that team are very important.

Sitting at the computer and writing is clearly the biggest aspect of my job, but I do like the fact that I also get to go out there and meet people. You're meeting corporate clients from the pharmaceutical industry, you're meeting authors, you're meeting some of the biggest doctors in the world and you're constantly engaging with them whilst working on all these different projects.

It's a very corporate environment so, as I said before, it's very different to academia. At the end of the day it is a business and that comes with all the kind of positive and negatives. At times it's very stressful the pressure is quite high but it's also very fast paced and very exciting; you don't really have time to get bored!

One thing that's different from academia is time sheets. I won't talk too much about that but you are required to keep track of everything you do, every project you work on. It's something to keep in mind; in a corporate environment you can't just sit around, you have to be constantly working on your projects because you're being paid for your time.

As I've hinted already, my favourite part is the variety of the work. Whether that's the character of the therapeutic areas you're working on or the nature of the materials you are producing, things are always

constantly changing. Everything you're working with is at cutting edge, at the stage we get any drugs are at a very advanced stage of development. You get the privilege of really seeing the way that things are heading, what are the latest drugs that are going to start coming on the market. It's fantastic to be involved in that.

To differing extents I've been involved in working on project related to diabetes, epilepsy, rheumatoid arthritis, schizophrenia, bipolar disorder, asthma, colorectal cancer and infectious diseases. We'd look at some of these as part of my Medical Genetics BSc degree at Leicester, but other topics were completely new to me. It's great to be constantly learning about something else, another new area.

A big aspect of the job is actually travel. This can be going on site to client meetings, to congresses, to advisory boards, anything like this. Some of it is not quite as exotic as it sounds. I've been to countless meetings at Frankfurt Airport! A lot of the travel involves you doing meetings in airports or at hotels, going back and forward. Often you don't get to fit in any sight-seeing. At other times though you do manage to get a bit of time to travel around, a bit of time to yourself but a lot of the time it's just work. I have been to some exotic places. In the course of a year I've been to Macclesfield, the various places in the States and Canada, and to Singapore. So it's a fast-paced, exciting job.

What would be a typical career path in MedComms? It goes without saying you're going to need a bachelor's degree in science in some kind of Healthcare or Medical or Biological Sciences field. As I mentioned, I initially did Medical Genetics at Leicester. I think traditionally people could get into this kind of work having only done a bachelor's degree and then they picked up the other skills on the job. These days some sort of Postgraduate study is generally required. There are a lot of people working in the industry with Master's degrees, but ideally they'd like you to have a PhD in a related field. I say related, but my PhD was on radiation damage not medical science directly. The point is though that you are building up your transferable skills by doing research.

A lot of people would go from a PhD into Postdoctoral research before deciding to switch to MedComms. I didn't do that, I went straight from my PhD into my current role, which is essentially an Associate Medical Writer. From there you learn the industry, you learn what the work entails, and you move on to become a fully-fledged Medical Writer. This is a general pattern. Different companies use different names for quite similar roles. Where I am right now they call a Medical Writer a "Scientific Writer" and there's no associate, you kind of phase into that one.

From there you would move on to being a Senior Medical Writer and potentially a Team Leader or Principal Writer, again different companies call it different things. Ultimately if you choose to stay within an agency the top position would be a Scientific Director who oversees everything going on within a given region, whether that's in the States or over here in Europe.

There are also many other options. After 10 or 20 years' experience, maybe less, people potentially move into freelance medical writing. The principal benefit of that route is flexibility, you get a bigger say in your hours, choosing when to work, what you work on, who you work for. Other people take the contacts that they've built up over the years and set up their own agency. That's potentially more lucrative for them, although it's a lot riskier as well.

Just to say a bit more about the different types of medical writing. The kind of stuff I've been describing, the work that I do myself, most people refer to that as medical writing. My firm calls it scientific writing. Alternatively there's something called clinical communications. This is the material that's more tailored towards patients. Most of the things I'm writing are directed towards doctors and nurses. I have occasionally worked on stuff for patients. For example, when a clinical trial is about to happen on a new

drug and they want to recruit patients for the study, you have to inform these patients, and the parents of these patients if they're young, so that they know what they're getting involved in. It has to be an informed decision and you want to keep them in the loop and knowing what's going on at all times.

The other type is regulatory writing. The audience for that is different; this is directed towards regulatory authorities, bodies like the FDA in America, the MHRA in the UK and the EMA in Europe. Whenever you are trying to investigate a drug or produce a drug, or to market a drug, you are basically answerable and accountable to these regulatory agents. They're not going to let you market the drug if you're not playing by the rules. There's a lot of documents that have to be produced to demonstrate that your client is doing that. Pharmaceutical companies have to be able to demonstrate that they have been working ethically, so there's a lot of work there as well.

I work for Parexel, who are one of the biggest contractors research organisations in the world. When a pharmaceutical company or a biotech company is putting out a new drug or product, they often outsource a lot of the different aspects of the work. An earlier speaker mentioned contract manufacture organisations, companies you can sub-contract to carry out the actual manufacture of a drug. Other companies, different types of organisations, can be contracted to do research on behalf of the pharmaceutical company. That's a CRO, and Parexel are one of the best known of these companies. The companies can also outsource the communications side of things, and that's my role. Some of the medical writing agencies integrate these processes so they have manufacturing arms, they have research organisation arms and they have communication arms and all sorts of other different aspects just to support the pharmaceutical industry as best as they can.

So how would you go about moving into medical communication? The best way is to try and get more of an insight into the work, into the industry and kind of what opportunities are out there is. There are various websites that can help. There's the [European Medical Writers Association \(www.emwa.org\)](http://www.emwa.org). That's a very good website. There's also a guy called Peter Llewellyn based in the UK who runs a website called MedCommsNetworking.co.uk. I've found that one of the most useful ways to look into the work and to find out more about the companies, the different agencies that are involved. He's got articles on there about medical writing, articles about clinical trials and pharmaceutical industry as well as a nice map and a list of all the agencies, including their contact details and little bits of info about them.

I found what the most successful way to go about applying and looking into the work is registering with recruitment agencies. There are specialised recruitment agencies for different industries. Some are for pharmaceutical work in general, but also for medical communications specifically. You give them your CV, then they might ring you up or email you to find out more about you and what you're looking for. Another good thing about them is that they will give you advice, which can be really helpful if you're preparing for interviews. Whether you eventually get the job through them or not it's very helpful and ultimately it's free because they get paid by the companies to get you into work, so for you it doesn't cost anything.

These days social networking is also very important. You'll find a lot of agencies have a good presence on LinkedIn or Twitter, they're constantly tweeting about what kind of stuff they're involved in, events that are coming up, that kind of thing. So it's definitely worth checking out what's going on there.

The actual application process for this kind of work mirrors other types of work you'll be getting involved in. It all starts with writing a cover letter and a brief personal statement. They'll probably call you back and ask for more information about you and what you're looking for. If you are applying for medical communications work one thing they will always ask you to do is to carry out a written test. They will give you a brief, for example they might give you a scientific paper, and they'll ask you to write something about

it. Perhaps they'll ask you to write an abstract for the paper, or to write a critique of it. They might ask you to put together some slides, things like that. What they want is to see how good you are at writing because that's obviously the main aspect of the job. They will also want to see how your mind works, how analytical you can be, to see if you can identify weaknesses and limitations within a study.

If you're successful the next stage will probably be a phone interview. After that they will progress to a face to face meeting and finally, if you make it that far, you might have a brief HR interview before starting work. All of that is probably true for most jobs these days, not just MedComm.

Ultimately the best thing I can say is to be mindful and conscious of what your transferable skills are. I remember when I was back here at Leicester there were lots of sessions about personal development, talking about skills. One of the most important things between where you are now and when you start applying for jobs is to become mindful of what skills you have built up. Right now you'll be writing essays, you'll be writing dissertations, theses and so on. The difference is becoming reflective about the fact that you've developed these skills and you're actively going forward with them. Don't think of these tasks just as an opportunity to get a grade, think about the processes of research and writing that you are developing in doing them.

An important aspect of this job, and something they're likely to look for at interview, is an attention to detail. Even though you're working as part of a team and the others in the process should be quality checking along the way, you've got to have very good attention to detail yourself to make sure that you haven't missed anything that needed to be included.

Good communication skills are a must, not just written but also oral communication, especially when you're working as part of a team. If you're presenting, if you're talking to a pharmaceutical client or if you're talking to a patient or a doctor this all involves an active living, breathing form of translating that information.

You have to be organised. By now you'll be developing your time management skills but one thing when you work as part of a business and when you work in an industry is that things constantly change. You'll have timelines, you'll have deadlines, you'll constantly be bombarded with new developments, someone will email you out of the blue saying something's come up. You have to be able to adapt and keep calm under pressure. It can be stressful work at times so it's kind of the good and the bad, it's very fast-paced, it's very exciting but in order to be able to cope with that you have to be able to deal well with stress and the pressure that comes along.

You have to be a good team worker. Internally and externally, all the different team members you'll be involved in will have their own deadlines to work to. If you're being paid to work to a deadline, and someone else is relying on you to hit your mark, then it's crucial that you are reliable.

Another important aspect is problem solving and critical thinking, you have to show you have an analytical kind of mind. You need to show you can process information and recognise the implications, not simply regurgitate it.

You also need to demonstrate a good understanding of the context in which clients are working. So, for example, if you want to work in MedComms it'll be important to show you have a good understanding of the pharmaceutical sector operates. It'd be good to know about clinical trials, to show you understand what the different phases involve; what they mean, what's involved, what are they looking at.

Hopefully this talk has also given you some insight into how the MedComms industry works. It's important you understand what a medical writer actually does, what would be expected of you, what you're letting yourself in for. Also you need to know about the regulations and guidelines we follow. If we're writing a publication, for example, you should consult the [GPP2 guideline](#), that's the good publication practice to making sure you are being accurate and transparent in your writing, to make sure what you're saying is actually the truth, based on fact [Note: a third version of the good publication practice [GPP3](#) was published later in 2015].

Unfortunately it's likely to prove quite tricky to get work experience as an undergraduate or fresh out from university. But if you don't try, you don't get. If you contacted Medical Communications agencies or even freelance writers they may be able to offer you paid or unpaid work experience, it depends what they've got going on. Look for other opportunities to write regularly, and for a variety of audiences. Obviously you will be doing your essays, but it's important to just show you are able to write in different ways. A lot of people these days write online articles. I'm not talking about Facebook update, I mean blog articles, those kind of things. If you do that it not only gives you practice, it also builds a presence, a portfolio of your work that you can mention in your CV and which potential employers can access. It's also something you can talk to about in your interview.

Finally, practice your presentation skills. You'll be doing presentations as part of the course, but that's definitely a skill you'll need beyond your degree as well. Again it's this whole thing about building your skills set. Attend relevant courses: MedComms writing, pharmaceutical industry generally, whatever you're looking into find out what types of events are going on, what kind of courses are on offer and see what you can get involved in.

Thank you very much for listening.

Q: The impression is sometime given that the pharmaceutical companies as the "dark side". How would you describe the relationship with them? How much are you involved with the ethics side?

A: When I first started looking into working in MedComms, I must admit that this was something that worried me. I thought if the pharmaceutical industry are the clients then are we just writing what they want us to say? But when I got involved in it I realised that compliance is a massive thing right now, in industry generally not just pharmaceuticals. You have to make sure what you write is scientifically accurate and not based on falsehood otherwise it's not going to be published, it's not going to be accepted and it will really negatively affect the reputations of those companies. If you get away with saying something not true now but get caught later it can mean a lot of financial and legal troubles.

So our relationship with them is actually not quite what you imagine. They come to us because of our expertise. They give us a brief, we'll plan out together with them the kind of work we'll do, but from there it's more about making sure everything is accurate, making sure we put out the right information. I've never had any trouble with that. In fact most of the time it's usually them telling us that "you can't say that it's too subjective, it's too kind of marketing orientated, you can't say it like that". Ethics wise, there's never really been an issue, as far as I've been concerned anyway.

Q: You mentioned about writing in teams a lot is that, I know documents go back and forward, is that just in the UK or is it around the globe?

A: Some teams I work with are all UK-based, some of them will be sitting right next to me. More often than not it is a big mix, I mean it can be people all over the country, it can be people working in different time

zones. Parexel itself was originally based in the States so there are a lot of people over there that we work with.

Chris Willmott: As you said some companies work in different time zones, they have someone working on the same document around the clock. I used to have a colleague here whose partner was moved to a company in New Zealand so that there could be three phases of writing and editing through a 24 hour period. From my perspective I would hate someone editing the stuff I've done, is that an issue or not?

A: At first, but you get that knocked out of you quite early on. You know that feeling when you've written an essay you're really proud of but it gets a rubbish mark and heavily criticised by your lecturer – at first it was a bit like that. You do take it personally. Then very quickly you start to realise you're actually doing it back to them as well. Ultimately the goal is to put out the most accurate, the best piece of writing. The best piece of material as possible, so you quickly get over ego issues.