



INNOVATION UNCOVERED

SHINING A LIGHT ON INNOVATION AND
CREATIVITY IN HEALTHCARE COMMS

THE TRUTH BEHIND A GREAT BRIEF

**INNOVATIVE PLATFORMS EMPOWER PATIENTS ON
FAMILY BUILDING JOURNEYS**

IN CONVERSATION WITH... PHIL HOWELLS

**SWITCHING THE PERSPECTIVE IN CLINICAL
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**INNOVATION
UNCOVERED**

THE HEALTHCARE COMMUNICATIONS ASSOCIATION HELPS

UNCOVER INNOVATION



Older readers may remember Restoration, a Griff Rhys Jones-fronted TV show in which Britain's worst fixer-uppers vied for funding. One contributor spoke of his love for a dilapidated water mill: "I got awful passion for t' mill," he told viewers.

Well, an awful passion for innovation burns brightly through every article in this edition. So much so, we idly wondered if it was possible to get married to an idea (it isn't, but **Angel Brown's** piece on the metaverse makes us think it might be in the future).

We've seen off another awards season, so two Communiqué judges tell their story, from the almost accidental arrival of **Phil Howells** in healthcare to industry stalwart **David Youds'** experience judging the best and brightest in innovation.

Beyond the glitz of Park Lane's ballrooms, we've tried to span the whole gamut of healthcare communications in this edition. An inspirational jewel of a case study from **Bhavin Vaid**, of Ferring, nestles in the heart of the journal.

Órla Weir, Dipanwita Das, Caroline Shepherd, and **Richard Graves** reckons the 'I' in AI should stand for innovation when it's used to increase the impact of biomedical publications.

Philip Atkinson and **Caroline Stern** tell us how Agile principles empower different ways of working.

Langland's **Diane Ross** shows us how innovation can cause a chain reaction in clinical trial communications.

I spend months every year teaching the art of creative briefs, so it's cathartic to read **Eliza Hancock** of Page & Page and Partners rage about the sorry state of creative briefing, especially the poor, misused, misunderstood and mistreated insight.

Welcome, then, to the second edition of **Innovation Uncovered**. We've avoided the 'difficult second album' syndrome. Unlike rock groups, we actively seek 'creative differences' to make this journal a success. Do you agree with our contributors (I'm more than on the fence about the metaverse)? Have you got a perspective, case study or idea we need to know about? If so, we'd love to hear from you.

Enjoy, **Stuart Mayell**



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THE TRUTH BEHIND A GREAT BRIEF

ELIZA HANCOCK, PAGE & PAGE AND PARTNERS // THE TRUTH BEHIND A GREAT BRIEF

Writing a great creative brief is not as easy as it might seem. In fact, those 1-2 sides of typed A4 are often the difference between a campaign that exists and a campaign that impacts; between creative communications that are seen and heard, and those that are felt and acted upon. Writing a creative brief is about much more than telling a creative team what your challenge is and who it's with; it's about educating them, enlightening them and, most importantly, inspiring them to think beyond the obvious to develop innovative creative solutions that will drive behaviour change in the audience.



“THE TRUTH BEHIND A GREAT BRIEF”

This could have been an article about what makes a good creative brief – a step-by-step guide to the essential parts you need to include to find the sweet spot between a ‘fill in the blanks’ brief and War and Peace – but it is not. The first reason for this is that Page & Page and Partners’ founders, Stephen and Kate Page, have already written **‘Forget the Box: A comprehensive guide to writing a good creative brief’**.

The second reason is that, in the autumn of 2022, we at Page & Page and Partners undertook some research into what constitutes a great creative brief, and **the results** revealed *something* rather disturbing.

Across the survey participants, most of whom are directly responsible for marketing strategy in global or EMEA roles at pharmaceutical, medical device, biotech and general healthcare companies, the majority noted that they consider eye-catching creative and greater differentiation as more important than basing the creative on genuine insights when it comes to the effectiveness of a campaign.

THE IMPORTANCE OF TRUST

Why is this so worrying? Eye-catching creative and strong differentiation *really are* vital aspects in enhancing campaign effectiveness. However, this response leads us to question whether, in an increasingly crowded marketplace, fraught with issues such as rising expenditures and problems with supply chains, companies are slipping into red-ocean territory. Are they forgetting about the need to resonate with audiences beyond creating an advert that is shinier than their competitors? It’s also concerning when we think about the current epidemic of distrust, which is rife around the world.

The ‘2022 Edelman Trust Barometer’ report demonstrates that people are more distrustful than ever, losing faith in both governments and corporations alike.¹ The reasons for this are easy to understand: against the backdrop of the pandemic and increased global political turmoil, people want to know who and what they can trust.

Trust is essential to the success of any brand. In fact, trust is the very reason that the idea of a ‘brand’ exists at all. If we think anthropologically about the Industrial Revolution of the 1800s and the movement of communities from rural, countryside economies to industrialised, urban sprawl, we can understand why brands started coming out of the woodwork. People could no longer rely on buying the products they needed from a trusted neighbour or community member and had to buy from strangers. This paved the way for brands to emerge, and over time they came to represent trust.

Fast-forward 200 years to 2022, a time when 63% of people believe that business leaders are purposefully trying to mislead consumers to buy their products or services by making exaggerated or false claims.¹ As costs continue to rise apace in the healthcare industry, it’s more important than ever to inspire and reinforce trust among the audience, to give them the encouragement they need to spend their budgets with you so that you can make every bit of your own marketing budget count.

What does all this talk about trust have to do with a great creative brief, you might wonder? An insight is purely a deeper understanding of the truth of your customer’s challenge, and therefore a great campaign brief must have insight at its heart in order to inspire your team to develop a creative solution which will really resonate. With this in mind, you can see why we found it so worrying that the majority of our survey respondents did not place insight as the most important factor in creating an impactful campaign, can’t you?



UNDERSTANDING INSIGHT AND THINKING DIFFERENTLY

The term 'insight' is all too often misunderstood. For some, the very word 'insight' is sullied by its association with overcomplicated branding tools and processes which result in creative that doesn't even make sense to the team that developed it. For others, it is oversimplified, relying on findings that tell us what the audience needs rather than giving us a deeper understanding of why they need it. But, while simple findings might tell us what the audience is doing, insights allow us to understand why they are doing it, ultimately allowing us to speak more directly to that inner truth.

Marsha Williams, president of Harvest Research Group and former senior vice president of Brand & Consumer Insights at Nickelodeon and MTV, states: "while findings are free to be trivial and merely interesting (or not), insights bear a much greater responsibility. Findings are often nice to know; insights should be considered need to know."²

And Marsha is right. Insights bear a responsibility, and so do we: the responsibility to discover them and then ensure that they are included in the creative brief so that teams can develop creative that will resonate with the audience's truth.

Insights are all the more essential because they provide the key to unlock our ability to think differently, to see a challenge through other people's eyes and to come up with an innovative solution that will cause the change in behaviour that is needed. To echo Apple's iconic 1997 tagline, 'think different' is a phrase that should be pertinent throughout the development of the creative brief. A great brief should not be a 'copy and paste'. We all feel the pressures of a fast-paced industry; in fact, more than 90% of our survey participants noted that the need to meet annual objectives or goals set by leadership is their top priority. These pressures can make us more inclined to economise our time or even cut corners, but it is imperative that we are not tempted to reuse past briefs with just a handful of details updated or skip the insight-mining process.

A creative brief needs to empower your team or agency to push the boundaries and think outside the box, and each brief requires a fresh approach if we are to avoid creating campaigns that are also a 'copy and paste'.



Developing a creative brief that encourages all involved to go against the grain will help your brand carve out a space in the market, moving closer to a blue-ocean strategy, where it can sail unencumbered by competitors whose communications all say the same thing as yours.

To create this sustainable space, we have to move away from competing on the features of our offering and start appealing to the human truth within the audience, to overcome confirmation bias and the fear of the unknown by inspiring trust in our purpose and the value we bring. There are many examples of brands that have communicated their mission – why their customers should trust them – through their creative outputs. Take Patagonia, which has always pursued a unique mission in the fashion industry to 'Build the best product. Cause no unnecessary harm. Use business to inspire and implement solutions to the environmental crisis,' which it has communicated through differentiated creative outputs to ensure that consumers not only notice them, but trust them, setting them apart from competitors in an industry which has been notorious for frequent mistruths and questionable ethics.

Patagonia's 2011 'Don't buy this jacket' campaign is a wonderful example of this: instead of trying to sell consumers a new jacket, Patagonia inspired them to embark on a journey of sustainability in partnership with them. The campaign raised awareness of the high environmental cost of making new clothing, and sales rose by 30%.³ Fifty years on from its creation, Patagonia continues to follow their purpose, and in September the news was reported around the world that all of the company's profits would now go to organisations to help fight the climate crisis. As the famous BBH black sheep advert for Levi's in the 1980s tells us, 'When the world zigs, zag.'

KEY PRINCIPLES FOR A GREAT BRIEF

There are many important aspects to nailing a brief. But not all briefs are created equal, so, to help give yours the edge that will inspire your agency or creative team, we recommend always considering the following principles:

01

FIND YOUR TRUTH.

What is it that your brand stands for? What is the truth at the heart of the audience? Once you find that key insight into their needs, their hopes and their dreams, then you can build a strategy and develop creative that will not just attract attention for a second because it's more sparkly than your competitor's, but it will drive lasting behaviour change in the audience because it lights that spark of belief that you can give them what they truly need.

02

ALLOW YOURSELF TO BE DIFFERENT.

Don't hop on the bandwagon and create a campaign or an asset just because everyone around you is doing so. Once you have discovered that human insight, set sail for a blue-ocean strategy and empower your agency or creative team to take your brand somewhere new. When it comes to the creative brief, don't 'copy and paste' what you've done before. You don't want your creative team to come up with a solution that you've used before, so use the brief as an opportunity to inspire them to think about your challenge in a different way.

Adopting these two principles can help you develop creative briefs that will light a spark in the minds of a creative team, helping them see the world through the audience's eyes so that they can develop creative outputs that help the audience see how your offering can make their world a better place. As Maya Angelou said, "We are only as blind as we want to be."

References

1. 2022 Edelman Trust Barometer. <https://www.edelman.com/trust/2022-trust-barometer>. Accessed January 2023.
2. Marsha Williams. *Insights vs Findings: Lessons learned from the trenches*. 2007.
3. "Don't Buy This Jacket" — Patagonia's Daring Campaign. <https://bettermarketing.pub/dont-buy-this-jacket-patagonia-s-daring-campaign-2b37e145046b>. Accessed January 2023.



IN CONVERSATION WITH...

PHIL HOWELLS // INTERVIEW

We grabbed some time with Phil Howells, creative director at Havas Lynx Group and a veteran of advertising creativity, to talk about how he fell into healthcare and his views on getting the best out of ideas.

Tell us how you ended up in healthcare...

I'd done the big London agencies thing for over 20 years, so I had a go at running my own small agencies in the north-west. The last recession wasn't working out so well, and then Tom Richards, former chief creative officer at Havas Lynx Group, asked, "Do you fancy coming in and trying out healthcare?" I was all ears. He explained his vision of bringing consumer-based creatives in, delivering better for clients and ultimately winning agency of the year, which seemed an exciting prospect. And, within a few years, we were Cannes Agency of the Year. It worked!

And how did you find the transition?

To begin with it was, to put it mildly, pretty complex. At one early meeting, someone told me, "You can't say that; it's a hanging comparator." Well, I figured I'd look like an idiot if I asked what a hanging comparator is. A friendly scientific writer may have come to my rescue!

But, like most creatives, I like to think I'm pretty resilient. Once I had decided to give it a go, I don't know why, but I found myself fascinated by it. I don't think I'll ever completely 'get it', but there's a line you cross when it suddenly makes sense. The care in language choice, the unbranded campaigns; ultimately, it's all about finding solutions.

And that's the whole point of creativity, no?

Quite right. One of the big benefits of drawing on consumer experience is the desire to solve problems by digging deeper into insights and strategy. When I sit on research calls or focus groups, just to hear what they're saying is always fascinating.

Is it unfair to compare consumer and health creativity, or should you be holding yourself up to the best in all industries rather than the best in just your own?

In the past three years, accelerated by COVID-19 and the resulting downturn in consumer budgets, you've seen more consumer creatives migrate into healthcare. This has really increased the competition, leading to a lot of interesting work – stuff that really gets your attention. That's the importance of getting the best creative talent on your brief.

That said, since I started working in healthcare, I like to imagine how the FMCG world would cope with the regulations we do. How could you prove to the satisfaction of a regulatory team that your toothpaste is whiter than white? And, of course, it's coming home to roost a bit, with increasing taxes and regulatory scrutiny of high-fat and high-sugar products. But, as we know with cigarettes, restrictions on advertising led to some of the most iconic and memorable creative ever seen.

On that note, what could healthcare creatives teach their peers in other disciplines?

There's the discipline that comes from the regulated environment, but there's also what we spoke about: problem-solving and resilience. It can be tough going, but don't be afraid to hang on to those ideas.

Additionally, grasp opportunities outside of the everyday. In healthcare, congresses provide a big canvas to do something different and interesting, but consumer creatives might look down on them. There's such a huge opportunity to take a broader brush, to embrace technology and digital ideas.

Can you help people to appraise and evaluate creative work that's presented to them, especially clients?

There can sometimes be a natural chipping-away process that can lead back into the world of classic pharma. If you see that happening, you have to take a moment and say, "Whoa, hang on! Remember, we don't want it to look or sound like what went before."

I was in a meeting recently and a colleague used Jurassic Park in an analogy. We were looking at storyboards, and it's easy to be underwhelmed. But imagine looking at the Jurassic Park storyboard, before all the green screen and dinosaurs and the amazing special effects. You have to keep the vision in mind as you develop something.

How then do you decide when something is the best it can be?

In a recent Dave Trott talk, he showed a process diagram in the shape of a triangle depicting how to achieve great work. At the very top is impact, what we're all aiming for. But below it, propping it all up, are the people, the insights, the strategy, the effort and the bloody hard work.

On a practical level, I'm asking, does this tick all the boxes on the brief? Is the impact there? Does the messaging demonstrate you know the target audience? But, at the back of my mind, I'm thinking, will this make a difference to our clients and, ultimately, our agency?

And how do you convince a client it is the best it can be?

Your passion matters. Clients want to buy into the passion you have for their business and your ideas. Of course, it's about audiences and data, but there's still a place for passion.

What do you see are the trends (good and bad) that people should be aware of?

We're told AI is gonna take over our jobs. I think, with the steps forward in pharma creativity, we've probably seen that threat off for now!

There are huge trends in craft. Illustration is growing and really helps with creating global campaigns. One-stop shops, the likes of Light Farm, Bewilder, and Red Strings, can give you access to excellent craft, whether video, digital, illustration, animation or something else.

What's the best bit of creativity you've seen this year?

You can't look much further than I Will Always Be Me!¹ It is just the most stunning piece of work. A deserved winner at Cannes this year; though, of course, Cannes is a completely different world.

Tell us why you find Cannes different? I have my own view...

You see these specialist campaigns, you know, winning stuff. The big, shiny ones.

And the question is, are they really competing on a level playing field with a pharma company commercially led campaign?

Well, yes. It's a wonderful showcase for craft, creativity and technology working in tandem.

Going back a bit, there was the C21² campaign for Down syndrome, I watched that and I cried. Who wouldn't want to be given the freedom to make such a huge difference to so many people's lives?

Thanks, Phil. Finally, what's your agency up to right now?

Thanks. It's been great to chat. We have some great projects in the pipeline, so watch this space. And I've been super impressed by our Hidden Lifesavers³ campaign.

RESOURCES

1. *I Will Always Be Me - The Book That Banks Your Voice*. Available at: <https://www.iwillalwaysbeme.com/>. Accessed January 2023.
2. *National Down Syndrome Society. C21*. Available at: <https://www.adsoftheworld.com/campaigns/c21>. Accessed January 2023.
3. *Hidden Lifesavers campaign*. Available at: <https://www.itsnicethat.com/articles/havas-lynx-harry-f-conway-hidden-lifesavers-advertising-280921>. Accessed January 2023.



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SUPPORTING INNOVATION IN HEALTHCARE COMMUNICATIONS:

PERSPECTIVES FROM A COMMUNIQUÉ AWARDS JUDGE

DAVID YOUDS // Head judge for the Innovation in Scientific Communications Communiqué award and CEO and founder of Resonant Group.

Having been involved in judging various Communiqué categories and been a proponent of innovation in the scientific communication space for many years, I was delighted to have been asked to be the inaugural head judge for Communiqué's Innovation in Scientific Communications award 3 years ago. The organisers of these awards had listened to their audience: they understood the need to incorporate more medical communication agencies and, by doing so, drive and showcase many aspects of the great work that this vital communication sector achieves.

Unlike other award categories that are heavily focused on measurable results, we felt this was a rare opportunity to be flexible in recognising and rewarding programmes that help us to improve scientific communications from their learnings, whether or not they were ultimately 'successful' in their first implementation. After all, innovation, like our clients' research, is often based on advancement and problem-solving rather than solely creativity.

Each year, my co-judges and I consider this before diving deep into the entries. Our starting point is always to remind ourselves of our definition of innovation and, in doing so, set off on the right foot. This is how we ensure that we recognise those making innovative changes to how the established scientific communication sector works – for example, by introducing new methods, ideas or products that make scientific communications even more audience-centric. We appreciate that what is innovative in one sector may be long established in another, and we believe that, at its core, what makes a programme

truly innovative is recognising the issue or problem we want to solve and having the foresight, freethinking and ultimately the bravery to apply a different solution.

We need to remember that this is not about the 'wow' that nobody has ever seen before; it is as likely to be about the 'wow' that has not been used like this before in our sector or with the audiences that we focus on. That is not to say that a genuinely groundbreaking 'first-time used' communication solution wouldn't be welcomed with open arms, but we appreciate that those events are few and far between. Incremental innovation is more likely to change the impact of communications within our sector.

This became quite evident, particularly during COVID-19. With an immediate need to communicate differently, driven by an enforced restriction on travel and face-to-face contact, pharma had to think differently and quickly. This was an excellent opportunity to go wild and launch those programmes that we had up our sleeves. Yet, that is not really what happened. While generalising, we saw greater use of existing channels in a way that had not been used before. For example, the use of social media in pharma communications is not new, but the strategy to manage the scientific communications supporting a drug launch solely through these channels had not been seen by the judges before. Fully remote engagement opportunities were not new either. But the results started to be different, and new ideas were being driven within the remote setting.

After the launch year, we took time to consider how we, as judges, could better advise entrants on their submissions. Ensuring that potential entrants understand what success is in this category is key: it is about identifying the problem, creating and implementing an innovative strategy and, most importantly, recognising the learnings more than the results per se. With this in mind, we updated the entry kit and revised the scoring system to ensure



that it would focus more on these elements than only on measurable results. This is a significant shift from other Communiqué awards and one that we feel is important if we truly want to reward the innovation.

As a result, in only the third year that Communiqué has run the Innovation in Scientific Communications category, we have already seen an improvement in the quality of entries. If I consider the awards that were shortlisted in 2022, there has been a shift towards a more hypothesis-based submission. Entrants are starting to write, 'This is what we saw, so we tried that, with this result. Next time, based on what we learned, we would do more of this and less of that.' The shortlisted entries this year were more along these lines, and the winner was decided upon due to the application of well-known methods from other communications disciplines to an issue that had existed for a long time. The innovation was simple, well positioned and brave in its implementation, and the learnings are already being applied for better future impact.

Another important piece of advice from the judges would be to reference the strategic choices that were considered and the reason for choosing those that were implemented. This provides the judges with a narrative that can be followed and enables them to appreciate the chosen tactics better. This sounds so straightforward. However, it is still a common thread through all awards entries in any category; most entries still confuse strategy and tactics, impacting the judge's view on the submission as a whole.

Finally, and really importantly for this category, we want to see how the hypothesis was tested, what metrics and feedback were sought and how this might develop even further in the future. This is the icing on the cake - we want to see the innovation's vision and believe that lives can be positively impacted in the future!

I am excited about what we will see over the next few years with this award. There are so many opportunities for innovation, and COVID-19 has only created more. Will we see a return to pre-COVID-19 communications, heavily based on face-to-face interactions? What will an effective hybrid or remote solution ultimately look like, and how will peer-to-peer relationships be developed for the betterment of medicine in this setting? With a Resonant Group company previously winning a PMEA innovation award for this, a personal favourite area of mine is how patients can be more involved with pharma and

how pharma can capture the value of a patient focus rather than treating it as an obligation. Opportunities exist for shifts in innovation before we even think about the enormous technological advances we see. Will we see entries based on remote or telesurgery? What will the evolution of the metaverse mean for scientific communications? There are so many exciting areas for companies and their agencies to explore and for us as judges to be wowed by!

A cautionary note concerns our interpretation of regulatory restrictions and how they are implemented. So often, our industry thinks, 'Can we really do that?' and, 'Will our competitors complain?' before implementing innovation that is even close to the edge of compliance. This can be frustrating as leaders in creative scientific communications and judges in this category. We can suggest innovation as individuals or agency leaders and reward it as judges. Ultimately, it is the regulations themselves and corporate fear of breaches which will stifle this, and we still need to help each other navigate this landscape.

It is an excellent accolade for companies and their agencies to win innovation awards. The true value of this category will be accelerated when both feel happy to openly share their learnings so that the whole sector can connect better with our audiences. For me, this is the Holy Grail, although one that has been found in other industries and one that I will keep striving towards in scientific communications.



CASE STUDY: INNOVATIVE PLATFORMS EMPOWER PATIENTS ON FAMILY BUILDING JOURNEYS

BHAVIN VAID //
HEAD OF CORPORATE
COMMUNICATIONS
AND PUBLIC
AFFAIRS AT FERRING
PHARMACEUTICALS

“ Creating a culture that embraces innovation and creativity was a key finding of the Cannes or Canned? report, the HCA’s initiative to increase creativity and innovation in healthcare and scientific communications. As one of the seven founding UK and global pharma industry communications leaders who inputted into this groundbreaking report, the Innovation Uncovered editorial team asked me to share my thoughts on what the results of this cultural mindset could look like in real life. I am pleased to share an example from my company, Ferring, on how championing this cultural mindset from within helped us to engage much better with and empower our patient community. ”



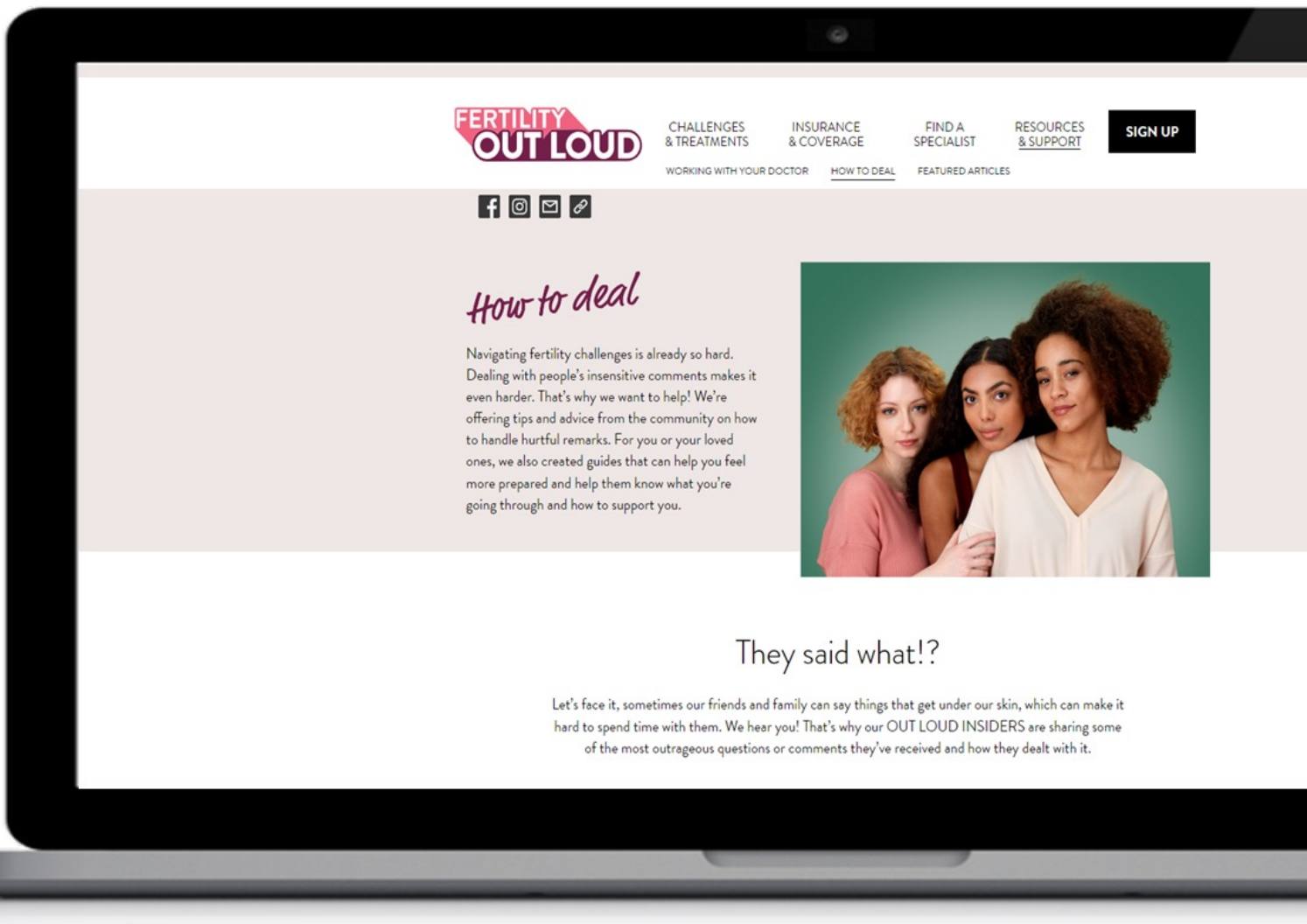


EMPOWERING PATIENTS FACING BARRIERS TO TREATMENT

As a leader in reproductive medicine and maternal health, Ferring is committed to improving the patient experience, providing innovative products and ensuring that those looking to build a family have the information they need to understand their fertility treatment options. Offering educational tools to empower patients on their journeys and addressing the needs of the patient community remains central to Ferring's dedication in the field.

Infertility impacts one in six women and couples globally!¹ Despite advancements in assisted reproductive technologies, many never seek treatment. This is not only due to access and cost concerns, but also the emotional burden faced by patients, the stigma and a lack of knowledge paired with common myths about the disease.

In the United States, Ferring's Reproductive Medicine and Maternal Health team identified a gap in the information, and the team supports resources available to people with family-building challenges and developed a strategy to meet the fertility community's needs through patient-driven platforms.



CHALLENGES & TREATMENTS

INSURANCE & COVERAGE

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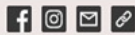
RESOURCES & SUPPORT

SIGN UP

WORKING WITH YOUR DOCTOR

HOW TO DEAL

FEATURED ARTICLES



How to deal

Navigating fertility challenges is already so hard. Dealing with people's insensitive comments makes it even harder. That's why we want to help! We're offering tips and advice from the community on how to handle hurtful remarks. For you or your loved ones, we also created guides that can help you feel more prepared and help them know what you're going through and how to support you.



They said what!?

Let's face it, sometimes our friends and family can say things that get under our skin, which can make it hard to spend time with them. We hear you! That's why our OUT LOUD INSIDERS are sharing some of the most outrageous questions or comments they've received and how they dealt with it.

With the goal of helping patients overcome barriers to care, Ferring's ongoing commitment continued with understanding the patients' unique perspectives. The questions, 'What causes patients to hesitate when seeking treatment?' and, 'What would help them to navigate their individual journeys and empower them along the way?' were pertinent in building platforms specific to their experiences.

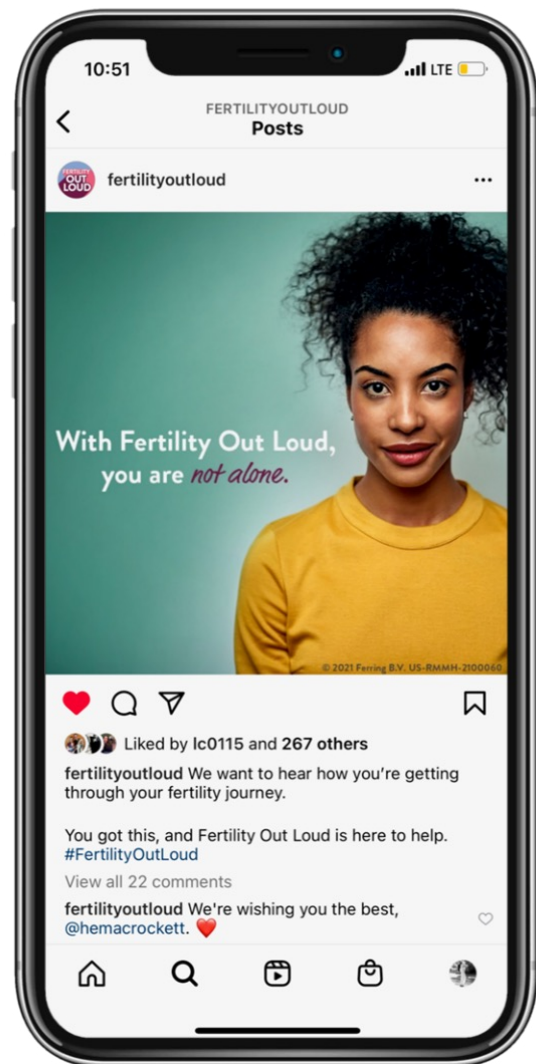
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CREATING PATIENT-DRIVEN PLATFORMS

Ferring recognized that answering questions about the infertility community's needs and concerns would start (and continue to evolve with) strong patient partnerships. To build programming that aligned with patient needs, Ferring partnered with patient advocates who have proven to be a key factor in the launch and sustained success of Ferring's **Fertility Out Loud** platform.

Launched in 2021, Fertility Out Loud is a platform and social community that provides resources and information for those struggling to start or grow their families. Ferring's close partnerships with the patient community and RESOLVE: The National Infertility Association, were the foundation for bringing the platform to life and garnering broadscale attention through multiple channels, including:

- A new website to serve as a hub of information for the community with resources for infertility challenges and treatments, insurance and coverage information, finding a specialist and more.
- Social communities on Instagram, Facebook and YouTube.
- Collaborations with several patient influencers willing to be 'out loud' about their infertility experience, guiding their audiences to resources provided by the platform.
- Broad-scale media attention driven by a vocal, A-list celebrity with personal infertility experience.



Proximity-based interaction replicates real-world encounters (image used with permission of www.gather.town)

When the COVID-19 pandemic brought new challenges for accessing treatment and heightened fears about trying to conceive in such uncertain times, Ferring listened closely to the patient community and developed new offerings to address these needs. Ferring developed **Fertility House Calls**, a nationally available platform designed to help prospective fertility patients take the first steps toward seeking treatment by allowing them to make their first appointment with a fertility clinic from the comfort of their home.

Keeping patients' evolving needs at the center of its efforts has been critical to the success of Ferring's patient programs. With the continued collaboration of patient advocate partners, Ferring introduced new resources on the Fertility Out Loud website for managing mental health during the infertility journey as well as facing treatment during the pandemic.

To help those who are struggling to feel supported during an extremely isolating time, Ferring and its partners continue to develop social media content to support those in various stages of their journeys with messaging and resources that patient advocate partners contributed to building.

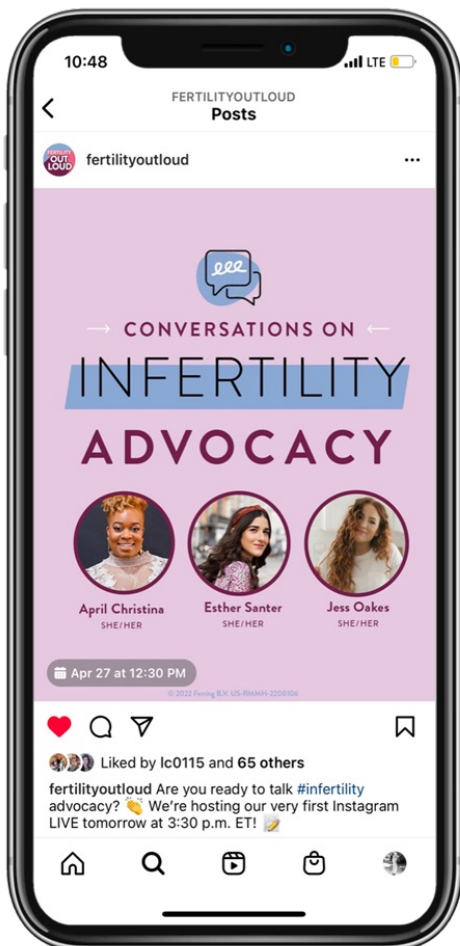
Today, Fertility Out Loud and Fertility House Calls continue to thrive through partnerships with influential patient advocates who help their audiences gain the education and empowerment they need to seek support. Keeping patients at the center of need identification and resource development has been instrumental in the success of these platforms.

REMAINING EAGER TO EVOLVE PLATFORMS THAT GROW WITH THE PATIENTS ON THEIR JOURNEYS

In addition to evolving Fertility Out Loud and Fertility House Calls to continue to support the infertility community's diverse family-building journeys, Ferring remains committed to provide innovative solutions to meet the community's ongoing needs.

In February, Ferring entered a 2-year investment agreement, including an acquisition option with Robyn, an online platform dedicated to supporting people building families. Together, Ferring and Robyn will work to offer expanded resources for people on their parenthood journey.

Building on these successes, the Ferring Reproductive Medicine and Maternal Health team continues to engage with the patient community to understand and address the needs of individuals on their unique and evolving fertility journeys.



REFERENCES:

1. *European Society of Human Reproduction and Embryology: ART Factsheet Available at: <https://www.eshre.eu/Europe/Factsheets-and-infographics>. Accessed January 2023.*

HOW CAN THE APPLICATION OF **AGILE PRINCIPLES** HELP HEALTHCARE ORGANISATIONS WORK DIFFERENTLY?



In this article, Caroline Stern and Philip Atkinson share a key observation about agility in life science organisations at the moment.

WHAT'S IN A NAME? THE MANY DEFINITIONS OF AGILE

Ask anyone in business to describe their view of 'Agile' and it's likely you'll get several different answers.

Philosophy, methodology, Scrum, Sprint, mindset are all terms associated with Agile, but perhaps because of the flexibility inherent in the Manifesto and the Agile principles,¹ no one has quite the same answer.

Browsing the huge array of articles and blogs, we see that people view Agile as an adjective, a noun and a verb. However, they more often focus on the adjective - 'able to move quickly and easily' (New Oxford English Dictionary) - rather than the noun (a set of methodologies) or the verb (living by Agile values and principles).

The organisational search for faster, more efficient ways of working and making decisions is nothing new, but, spurred on by the COVID-19 pandemic, Agile seems to have emerged as a management Holy Grail.

For us, working as we do in the pharmaceutical and biotech industries, we see that teams are facing increased regulatory, fiscal and generic challenges, with the need to deliver to even tighter deadlines. We regularly see executives in back-to-back meetings with no time to reflect on anything other than what is in front of them right now. We see employee burn-out and a lack of direction. We see the big resignation and, now, increased restructures and an uptick in company redundancies.



PHARMA AND AGILE

So, Agile as a method of facilitating rapid decision-making and learning cycles as outlined by McKinsey² would be hugely beneficial. It's not like pharma hasn't used Agile before: in addition to pharma research and early discovery, it has also been applied to drug development, change programmes and across the board as a flexible methodology which provides structure and speeds up delivery times.

But, in the rush to apply Agile to all parts of the pharma industry, some leadership teams seem to have lost even more of the vital meaning of the Key Values and Principles of the Agile Manifesto¹ or simply assumed they knew what working in an Agile way looked like. Many will have wanted to adopt a 'mindset' rather than the whole shebang, and, essentially, they were attracted by the idea of speed and the adjective version of Agile.

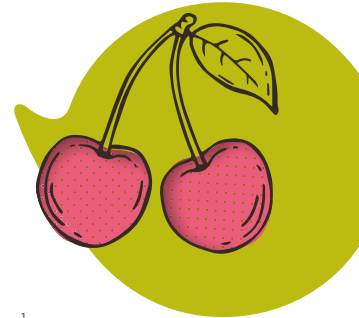
SPEED ISN'T EVERYTHING

As Colin Bryar and Bill Car in HBR³ point out, speed isn't everything. Being Agile doesn't mean driving a relentless pace alone; trying to deliver as quickly as possible can mean you don't spend sufficient time scoping and working out what would delight the customer. It may also mean you don't create the capabilities needed for working in an Agile way. Working with the skills you have, rather than identifying what skills and abilities you need for Agile, may limit your ambitions if not your results.

Agile practices (Scrum, Kanban, etc.) are subservient to the more difficult and greater effort of being Agile-minded or operating within Agile values. Many organisations have a fixation on process without recognising that, however autonomous they are, the team won't change course or take difficult decisions unless they're confident that the leadership team trusts them to (and will let them) make the right call. So, the culture of the organisation as well as individual teams is crucial. As we know, culture is anything but a quick fix.

As BCS Consulting,⁴ part of Accenture, suggests, executives introducing Agile working will be battling employees' psychological preference for certainty over uncertainty, alongside the typical governance and reporting structures inside large enterprises which squash everything into a reporting cycle. And, they add, the traditional concept of leadership is someone who sets direction – fitting Agile values around this concept may be tricky for some people.

So, while some people have understood Agile and speed to be the same thing, they are not interchangeable.



MISUNDERSTOOD, OR CHERRY-PICKED?

While the Agile values and principles¹ seem deliberately loose, anyone having the briefest glance at them would see that, applied well, Agile is a tool for learning from mistakes, reflection and purposeful action.

Two of the Agile principles illustrate this and resonate with what we've seen in our work in pharma and biotech.

- Simplicity – the art of maximising the amount of work not done – is essential.

One of the things we've seen executives struggle with is learning what to STOP. If this principle were applied to organisations, it could yield huge benefits by preventing pointless meetings and redundant data gathering and shortening the decision-making cycle.

Another of the principles is:

- At regular intervals, the team reflects on how to become more effective, then tunes and adjusts its behaviour accordingly.

It's rare indeed for organisations to reflect on how they work and what they work on. Many executives are too busy just managing their work as it is to think about improvement. But this is how improvement happens: reflect, identify issues, change something, test and retest.

SLOWLY DOES IT...?

Agile thinking is about delighting the customer and enabling the organisation to be more flexible. In the modern world, things can change overnight, so, to maintain competitiveness, companies need to be able to respond. It's hardly surprising that a philosophy that facilitates a quicker response would be eagerly seized on by management teams.

But, to reap benefits, the Agile mindset needs to be properly understood. Agile is not the opposite or the enemy of formality, processes and meetings, and it's not chaos. It's a rigorous, disciplined approach by which people know the most important thing they have to do today and are expected to continually learn, share information and keep the customer in mind.

Reconsider your Agile mindset by asking yourself the following questions:

- Are we putting the customer first?

- What are they telling us?

- Are we listening?

- Are we putting quantity and output over quality?

- Are we putting people over processes?

- What are our employees telling us?

- How do we respond to mistakes?

- How do we learn from mistakes?

- Are we responding purposefully to changing dynamics or just racing on?

- Are you choosing what you respond to and what you let happen?

- Are we taking one step at a time and then reassessing where we are?

- Are we pausing to evaluate and reflect where we stand, what's going on and where we are going?

And two acid-test questions for ongoing projects:

- How and how often do you gather feedback?

- How much have you allowed in the budget to accommodate customer feedback?

If you're disappointed in the answers and would like a conversation to discuss your thoughts, please get in touch with Phillip and Caroline for a call.

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REFERENCES

1. *The Key Values and Principles of the Agile Manifesto*. Available at: <https://resources.scrumalliance.org/Article/key-values-principles-agile-manifesto>. Accessed January 2023.
2. *The five trademarks of agile organizations*. Available at: <https://www.mckinsey.com/business-functions/organization/our-insights/the-five-trademarks-of-agile-organizations>. Accessed January 2023.
3. *Have we taken agile too far?* Available at: <https://hbr.org/2021/04/have-we-taken-agile-too-far>. Accessed January 2023.
4. *Agile - its an adjective not a noun*. Available at: <https://www.bcsconsulting.com/blog/agile-its-an-adjective-not-a-noun/>. Accessed January 2023.

SWITCHING THE PERSPECTIVE IN CLINICAL TRIAL COMMUNICATIONS

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Shifts of scientific focus are nothing new. Perhaps the greatest example was when, in the 17th century, Galileo revolutionised the way people saw the universe by asserting that it was in fact the Sun, not the Earth, that existed at the centre of the solar system. And although clinical trials and cosmology are not instantly comparable, both depend on fresh perspectives and a correctly identified crux. So, by bringing the patient – not the science – to the heart of clinical trial communications, we have the potential to improve the rocky road to successful clinical research.



LOST VOICES

The voice of the consumer has always been central to the best creative healthcare campaigns. But while the rise of patient-centricity in pharma has been around for years, within the niche of clinical trial communications to healthcare professionals (HCPs), the typical focus remains on the science, clinical data and evidence.

“It sounds obvious, but it’s good to be reminded that, like patients, HCPs are humans too,” says the creative director in the Clinical Trial Experience (CTE) team at Langland, Vickie McGee, “and humans respond to narratives, not numbers. We’re a storytelling species at the core. Of course, while data should be the foundation stone that underpins all we do, it’s difficult to empathise with a P value. But when you unpack the statistics to reveal the individuals at their heart, those same numbers gain much more meaning.”

Historically, clinical trial investigator meetings (IMs) have focussed on traditional information transfer rather than embracing more collaborative or case study-based techniques that are now mainstream in wider HCP engagement activities.

The problem with this traditional approach is that patient insights and the true burden of the disease can’t cut through. Instead, the patient’s voice is blanketed by dense scientific content and detailed protocol information. The potential lack of human connection in IMs can, in turn, lead to a lack of empathy and engagement, creating a disconnect between the sponsor’s goals (a new, approved treatment) and the clinical trial’s requirements to be successful (participant uptake with minimal drop-out). The end result? Potential delays in the completion of clinical trials, which can cost around £7 million a day in lost revenue – a huge thorn in the side of big pharma.

THE CHALLENGE

At Langland, we pride ourselves on seeking fresh perspectives and thinking further. So, in 2021, when a client approached us with a complex brief, we saw an opportunity to create something innovative within the field.

We were asked to design and deliver an IM for HCPs involved in a new clinical trial. So far, so good. But throw in the fact that this is a first-in-human trial with a niche eligible population that is facing a healthy hesitancy from both participants and investigators... well, we knew we had a hefty challenge on our hands. How to build trust, excitement and momentum that could trickle down to potential participants and trigger recruitment? We needed to innovate. We needed to reinvent. We needed to connect with investigators to establish unparalleled levels of commitment to the challenge ahead.

WHERE DID WE START?

Our approach was not a radical, methodological reconstruction. It was a simple shift of focus. As highlighted in the previous issue of this journal, 'the quality of innovation is linked to the quality of the creativity, which in turn is linked to the quality of insight'. Uniting patient insight with the power of creative storytelling was a streamlined strategy, one that put the patient first, and one that we used as our crux. Paul Smith, a business storytelling coach, writes, 'Experience is the best teacher. A compelling story is a close second'.¹ Listening to the stories that patients share with us and positioning these insights front and centre is the linchpin of our CTE work. So, we reflected on successful recent work that showcased patient stories.

On International Clinical Trials Day last year, we spoke to participants in two neurology trials. One of these was a pioneering and ambitious trial in Parkinson's disease. It involved implanting 'plumbing' directly into patients' brains. But instead of zooming into the science or the study team's objectives, we focussed squarely on the experience of the participant. "Don't recruit people as patients. Work with people as if you're recruiting them to a research team, so they feel empowered and professional," said one of the participants we interviewed. Simply by listening to patients, we gained raw, emotional and engaging content for our treasure chest of insights.

WHAT DID WE DO?

The word 'innovate' stems from the Latin verb *innovare*, which translates to 'renew'. And that's what we did. We created an experience for HCPs, not just an event. Like a golden thread running through the science, we wove patient insights from patient panels, online blogs and interviews into the IM – their thoughts, fears and hopes for clinical research. We then created an engaging story arc of the patient journey at each stage of a clinical trial, complemented by a series of avatars – each one representative of a different person who could be eligible for the trial, depicting their needs in terms of information and support, from the first conversation to trial completion. The IM was structured with a mixture of formats to maintain energy and engagement. We had keynote presentations and group discussions to facilitate intimate deep-dives and informal conversations. In short, we pulled back that dense blanket and let patient insights sing.



THE RESULT

This journal aims to shine a light on innovation and creativity in healthcare communications. And while we might be tempted to keep our trade secrets to ourselves, we know that by sharing best practices we can help improve healthcare for everyone. The IM that we created was a huge success, and not just from our perspective.

Feedback via post-event surveys indicated that 100% of respondents understood the recent protocol updates and felt confident in implementing these in their clinics, and 90% agreed that they have the tools and resources needed to recruit potential participants.

Innovation isn't just about doing something spectacular and wildly different (although of course it can be). It's also about doing something nuanced, shifting the focus, turning things back to front or being experimental. In the words of Thomas Smith, 'Innovation is any change, big or small that makes a difference'.² And putting patient insights and their story first in clinical trial communications is a perfect example of small creative thinking that has a huge impact.

References

1. Smith, P. 2012. *Lead with a Story*. American Management Association, New York.
2. Smith, T. 2013. *Journey in Leather*. CreateSpace Publishing.

HOW CAN AI INFORM THE REAL-WORLD IMPACT OF BIOMEDICAL PUBLICATIONS

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SUMMARY

Peer-reviewed publications are a foundational element in the communication of scientific evidence about biomedical research conducted by and for pharmaceutical and biotechnology companies. Current quantitative methods for measuring and analysing scholarly literature are limited in evaluating the impact of biomedical publications on driving research informing healthcare decision-making. Adding artificial intelligence (AI) to these methods can instigate a move from statistical evaluation to textual evaluation, at a scale that can significantly enhance the quality and understanding of the true impact that published scientific research has on scientific debate and, ultimately, its impact on the role of a medicine in improving patient outcomes.

In this article, we suggest using AI-powered analytics to develop new and comprehensive ways to measure the impact of a publication, not only on research, but on clinical practice. We highlight approaches to measuring when scientific research actually informs changes in clinical practice.



Setting the scene

Peer-reviewed medical publications play an essential role in disseminating clinical trial evidence, promoting data transparency, contributing to scientific debate and supporting regulatory submissions for medicines by pharmaceutical and biotechnology companies.

Peer-reviewed publications provide the foundational evidence for the statements made about a therapeutic approach. This is critically important for all communications with healthcare professionals for building knowledge of the benefits, risks, tolerability and potential adverse effects of the treatment and for ensuring optimal patient selection and outcomes. However, developing publications requires time and expertise. Therefore, it is important to know whether and to what extent the publication is achieving its goal of informing clinical decision-making.

The peer-review process is the gold standard for ensuring the quality of scientific evidence published in a journal. The ranking, or tier, of a journal depends on many factors, including reach, impact factor and citations. While authors generally want to be published in high-tier journals, acceptance rates are low, and reach to the desired audiences can be limited. Furthermore, acceptance of the article and the ranking of the journal alone do not answer the fundamental question about impact on clinical decision-making through informing scientific debate and patient care.

How is the impact of a publication currently measured?

Current methodologies for evaluating the impact and authority of a peer-reviewed publication rely primarily on statistical scoring methods utilising the raw count of citations for publications, and these are also used to calculate journal, author or institution impact.

A number of metrics and measurement regimes already exist, which include:

- Reach and impact factor of the publishing journal

- An author’s scientific authority or h-index, which is a ranking based on the number of publications by an author and the citation count per publication

- Citation counts

- Comments and downloads

- Tracking social sharing and the use of publications in the news, websites and policy documents, using altmetrics¹ or a variety of web-based metrics to provide qualitative data that are complementary to traditional, citation-based metrics.

What else is a measure of the impact of a publication?

Measures, up to now, have focused on numerical counts that sum a citation, a download or a set of viewers. However, the impact of a peer-reviewed paper is also about the quality of its argument and data. For example:

- Is the article reaching the people seeking this information?

- What actions does the article drive?

- Is the article informing understanding of a treatment?

- How do the audience use the knowledge?

- How rapidly is the publication now being cited?

- Are the citations supportive?

- Are patients engaging with a publication and/or plain language summary?

- What about the share of voice and the ecosystem of the social sharer?

- To whom is the social sharer connected?

- How are conversations in social media being evaluated?

How can AI bring novel approaches to measuring clinical impact?

Until now, questions concerning the ways by which AI can bring novel approaches to measuring clinical impact have been measurable only by a manual review of publications by a researcher or team evaluating the text against a set of review criteria. With the rise of large language models and deep learning methods, AI can now analyse the context and contents of peer-reviewed publications at scale.

The various applications of AI are starting to provide novel measures and are enriching publication databases and indices with new methods of calculating scientific and clinical impact. Examples include measures of scientific sentiment, through which citations are classified by a deep learning model according to whether the citing paper contrasts or supports the core argument of the cited publication, providing so-called smart citations. For example, this is seen in Scite.ai's evaluation of COVID-19 literature.² Open online access to full-text articles and cooperation from publishers is required to extract and analyse citations at scale, such that over a billion citations from over 32 million full-text articles have been indexed in this way by Scite.³

Tracking reach in publications

While altmetrics and social metadata can reveal where peer-reviewed papers (and associated presentations) are discussed and shared in the online social sphere, AI can go further in tracking reach. It can, for example, evaluate clinical impact using similarity scoring of the text in the medical literature and in the clinical practice guidelines the literature informs, even without formal citations.

From tracking reach to tracking the proliferation of ideas

AI can be used to assemble and enrich author knowledge graphs and identity graphs, which are databases that depict relationships between data entities, such as, in this case, authors and publications and journals. These graphs unify articles published under different author identities (e.g., initials versus name) and provide a digital track record of the relationship that a particular author has with other authors in an influencer map.

The correlation of h-index of an author to scientific reputation has been questioned because of changing authorship habits, resulting in the inflationary effects of hyper authorship (more than 50 authors on a

paper⁴) and the gaming of publication metrics when an article seeks high volumes of contrasting citations.⁵ To address this, AI can enable new data methods using natural language understanding (NLU) to track scientific sentiment and proliferation of unique concepts over time, from original text (which may be published in a little-known journal) to its widespread adoption and hyper authorship. NLU is an advanced field of AI, enabling computer models to process, understand and analyse natural language and interpret the subject matter, relevant topics, sentiment and even the tone of a body of text or speech.

Call to action: harness the power of AI to measure the clinical and real-world impact of publications

The possibility of better measures at scale, which provide a level of context that was not possible with numeric, statistical measures alone, is providing many new avenues for measuring the impact of publications. While AI research on publications is a major field unto itself, the medical publications field has not yet settled on good publication practices for adopting AI and the novel data it is bringing to the field.⁶ By employing advanced analytics enhanced by AI, we have a real opportunity to more accurately measure the real-world impact of medical publications on clinical decision-making and patient outcomes.

REFERENCES

1. Priem J, Taraborelli D, Groth P, Neylon C. (2011). *Altmetrics: a manifesto*. Available at: <https://altmetrics.org/manifesto/>. Accessed January 2023.
2. Khamsi R. (2020). *Coronavirus in context: Scite.ai tracks positive and negative citations for COVID-19 literature*. Available at: <https://www.nature.com/articles/d41586-020-01324-6>. Accessed January 2023.
3. Nicholson J. (2022). *How to build a GPT-3 for science*. Available at: <https://future.com/how-to-build-gpt-3-for-science/>. Accessed January 2023.
4. Cronin B (2001). *Hyperauthorship: a postmodern perversion or evidence of a structural shift in scholarly communication practices?* *J Am Soc Inform Sci Tech.* 2001;52(7):558-569. doi.org/10.1002/asi.1097.
5. Koltun V, Hafner D. *The h-index is no longer an effective correlate of scientific reputation*. *PLoS ONE.* 2021;16(6):e0253397. doi.org/10.1371/journal.pone.0253397.
6. Crossnohere NL, Elsaid M, Paskett J, Bose-Brill S, Bridges JFP. (2022). *Guidelines for artificial intelligence in medicine: literature review and content analysis of frameworks*. *J Med Internet Res.* 2022;24(8):e36823. doi.org/10.2196/36823.

FURTHER READING

1. Priem J, Hemminger BH. *Scientometrics 2.0: new metrics of scholarly impact on the social Web*. *First Monday.* 2010;15(7). doi.org/10.5210/fm.v15i7.2874.
2. Borgohain DJ, Bhardwaj RK, Verma MK. *Mapping the literature on the application of artificial intelligence in libraries (AAIL): a scientometric analysis*. *Library Hi Tech.* 2022; online ahead of print. doi.org/10.1108/LHT-07-2022-0331.

THE METAVERSE: FOR ONCE, COULD HEALTHCARE BE ONE OF THE FIRST?

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Those of us in the creative industries in healthcare accept a bittersweet trade-off. We get to work on projects that make a difference to humanity, but this often means we have to sacrifice being able to work on the very latest, coolest stuff. When our colleagues tell us they are working on an AI-based mash-up with influencers and user-generated content, we have to admit, well, yes, that is interesting work. Under our breath, however, we tell ourselves that it's OK, nothing to worry about, because the product is invariably chocolate bars or similar. We can keep hold of our vision that we get out of bed for something more meaningful, something that could save lives, and we accept that this often means we will always be lagging behind.



The adoption of the metaverse could play out differently, however. A fairly elastic concept still, the metaverse stretches around a diverse variety of ideas and acronyms: blockchain, non-fungible tokens (NFTs) and the next generation of the internet or Web 3.0. You may think the impact of all this is still only a glimmer on the horizon, but, according to a 2022 survey by PwC, 44% of business leaders reported that they expected the metaverse to be 'business as usual' within 2-3 years.¹ With 58% of consumers also reporting in the same survey that they would like to engage with their healthcare providers in the metaverse, the opportunities to start defining what healthcare could look like really do start here and now.

GETTING HEALTHCARE ON THE BLOCKCHAIN

So, what does the blockchain have to do with healthcare? The blockchain is a type of distributed ledger that offers a way to securely and efficiently create a log of sensitive transactions. The most common example is cryptocurrency, but, in healthcare, the blockchain could be used in a number of ways, e.g., personal health data, records of blood donations, vaccines or even tracking medicines as an anti-counterfeit measure (just to name a few). It can also be used to store evidence of participation in a clinical trial or attendance at an event, which could be used to access additional services. The blockchain is also used for recording ownership of graphic images, aka NFTs. These tokens triggered a gold rush of speculation last year, and those who got in early made a lot of money, as they were able to buy when hardly anyone knew about NFTs and sell at a time when a groundswell of newcomers rushed in, eager to get a piece of the latest money-making trend. Once the wave passed, the value of NFTs plummeted, but the concept is here to stay. Some healthcare organisations have already created NFTs, such as Dentaverse, who created a collection of 4000 3D dental images² that users could buy to become a community member and gain access to their services.

Despite the enthusiasm and many emerging use cases, the healthcare industry touches data, especially personal data, with great trepidation. Though most pharma companies are becoming adept at analysing real-world data and using advanced analytics to prove the value of their drugs, they still

know little about their customers and less about their patients. Data privacy concerns will take time to unravel, and there will be many hurdles to overcome to enable healthcare to operate on the blockchain. There are already some promising ideas surfacing, however, such as those of Amedis, a team of healthcare and IT professionals who seek to build a healthcare economy in the metaverse.³ They suggest that, in the near future, we will be able to have our own health data as NFTs on the blockchain and will be able to sell it to the highest bidder.² It won't be the easiest facet of the metaverse to get past the regulatory teams, but the rules are already being drafted. Kavya Pearlman, the 'Cyber Guardian' and founder and CEO of XR Safety Initiative, is a pioneer of the novel XRSI Privacy and Safety Framework for the Immersive Technologies Domain.⁴ She and her coalition's continued groundbreaking work will lay the secure foundations that will enable healthcare to leap out of the starting blocks with confidence.

IMMERSIVE TECH MAY BE FIRST

In the meantime, however, a more immediate emerging opportunity is the aspect of the metaverse that is immersive tech or extended reality (XR). In these terms, we include augmented reality (AR), virtual reality (VR) and mixed reality (MR). Healthcare is well ahead in utilising some of these technologies and has a long history of pioneering VR in education and training, and for congress experiences. In medicine itself, many innovative seeds have already been planted in the minds of clinicians. In corroboration with previous research, a recent study published in PLOS ONE shows that VR is well received by patients and providers and allows increased patient engagement and treatment individualisation in both pain management and psychiatry.⁵

Remote care is also an area where learnings and use cases can be expanded upon in the metaverse. Surgeons have already made great inroads into the space of remote surgeries. It was as long ago as 1985 when Arthrobot was the first robot to assist in surgery.⁶ Twenty-one years later, in 2006, an AI conducted an unassisted surgery on a 34-year-old male for heart arrhythmia.⁷ It doesn't seem like much of a stretch to imagine how being able to consult with your remote surgeon in VR before the operation would be highly reassuring, as she could show you your heart in 3D and show you exactly what she will do in collaboration with an AI assistant.

DIGITAL TWINS AND 3D VISUALISATIONS CAN IMPROVE CARE

Another connected development, digital twins, points to an exciting potential application for immersive technology that will lead to increased personalised care. It is now possible to create a dynamic virtual copy of a physical organ or system in the body through real-world data and AI. The virtual model is a digital model of the entity which contains the variables and abilities of the physical entity and shows its properties, geometries and behaviours in the virtual world.⁸ Where immersive tech comes in is that XR can be used to provide visualisations of the model that represent the fusion of the virtual entity and the physical entity. Research on digital twins is being done in many therapy areas, such as in orthopaedics to understand the biomechanics of the spine and in cardiology to understand the heart and cardiovascular disease. It won't be long before clinicians routinely interact with these models together with their patients in the virtual space, even if they are far away.

From a creative perspective, some of the most exciting advances are in the ability to create hyper-real graphics. Gone are the days of awkwardly animated and rather ugly characters in games and 3D worlds. With the introduction of Epic Games' Metahuman,⁹ we can now use hyper-real human characters in our virtual experiences. Other technologies by Epic, such as Unreal Engine, are quietly driving a revolution-in-the-making through the integration of photo-realistic backgrounds into traditional film-making practice. Always at the forefront of cinematics, Lucasfilm's Industrial Light and Magic pioneered a new creative process for The Mandalorian TV series: 3D environments were projected live using Unreal Engine on the backdrops of the scenes instead of the usual green screens.¹⁰ The actors could then act in an environment that looked and felt much closer to the end result. As this technology becomes more widely adopted, creatives will increasingly have the ability to have a more finished view much earlier during the creative process. This not only provides efficiencies but also opens up more opportunities for creative iteration and trying out new ideas as you go.

ENTER THE METAVERSE

Somewhat ironically, whilst creators are increasingly able to get their hands on new technologies that enable us to make increasingly realistic 3D characters and spaces, the coming of the metaverse offers specific challenges in terms of experience. Right now, the metaverse hot spots, Decentraland, The Sandbox, Roblox and Meta's Horizon Worlds, are all created with simple graphics due to the limitations of VR headsets and most common laptops. More aesthetically driven experiences do exist, though they are less well known. Journee is an example of a company whose mission is to create 'a beautiful metaverse' that stands in direct opposition to the others, as the general experience is very cartoon-like.¹¹ If you have ever played video games at all, think of the others as more Lego Star Wars and Journee being like Fortnite. Whatever they look like, these metaverse platforms feel very much 'open for business', as these are spaces that feel primed for commercial use, where brands can buy land or rent spaces and create experiences. Users can visit a brand's building and interact with the content, watch videos and, invariably, view NFTs that can be bought and sold on other platforms like Open Sea.

Though much touted in the media and with astronomical valuations, these worlds are seemingly still only sparsely populated. Decentraland was just outed by DappRadar for having only 38 daily active users.¹² Decentraland disputes this number and says the real number is more like 7000. Wherever the true figure lies, when you visit Decentraland, The Sandbox or Horizon Worlds, they do feel rather empty. The users appear to be made up, in my very humble opinion, of a few tentative adult adventurers and a lot of children, usually screaming and tearing about the place looking for mini-games and other silly things to do (like making dog-sized popcorn). This will change quickly, however, as the next generation already has its own metaverse in Roblox, and they are growing up. Roblox, where tomorrow's workforce explores, plays and interacts in a vast universe of games, has 50 million daily users, with half under 13.¹³

Roblox aside, with all the investment by Meta behind Horizon Worlds, we would expect it to be further ahead of the other contenders. Meta absolutely expects Horizon Worlds to be a place where people not only play but work together. The additional burden of it being a VR-only space may slow it down, as users must have a headset, but this is not necessarily a problem, as the platform claims it already has 300,000 users.¹⁴ We also would expect many of the more innovative clinicians to have headsets now due to the launch of the low-cost, standalone Quest headset and Meta's promotional push last year. There is enough of an audience to get started, but more of a problem is the stark admission, as reported in a leaked internal memo, by Meta's VP of Metaverse, Vishal Shah, that the team building it doesn't even use it very much. He asks, 'Why don't we love the product we've built so much that we use it all the time? The simple truth is, if we don't love it, how can we expect our users to love it?'¹⁵ Well, yes, indeed. The events in Horizon Worlds remain perhaps the most exciting experience today, as they employ 360° video, and you can stand virtually in the ring with MMA fighters or right up close to your favourite band without any fear of moshing.

So, where's the value for healthcare? Right now, it's not yet there in Decentraland, The Sandbox or Horizon Worlds. There just isn't enough to do yet, and exploring these worlds just isn't interesting enough to make it worth the bother, unless you have a nostalgia for video games from the '90s or you really want to catch sight of Snoop Dog's avatar in The Sandbox. This will change quickly though, as this year the American pharmacy giant CVS became the first major pharmacy to introduce an application before the US Patent Trade Office to register their logo within the metaverse. They intend to offer an online store providing prescription drugs, health, wellness, beauty and personal products in the form of NFTs, and they also plan to close 900 of their physical stores over the next 3 years.¹⁶ Taken on face value, these do not appear to be independent intentions.



START NOW WITH MEETINGS AND EVENTS

Even if we aren't quite ready to work in the metaverse, for now, for healthcare companies looking to dip a toe into Web 3.0, the most interesting ways will have to be healthcare-specific spaces, with the most likely initial use cases being meetings and events. Hybrid events offer opportunities to create immersive experiences with VR or AR, and, with many events looking to provide ways to reach healthcare professionals that can't attend in real life, including a metaverse meeting space seems an easy win. To complement their Metaverse Summit, The Economist recently used Virbela to provide an immersive experience to attendees.¹⁷ There are other players in the enterprise space, each with their own take on the B2B metaverse, such as Engage, who describe themselves as 'the professional metaverse', and Meetaverse, who use mini Zoom-like videos as a user's avatar. Creating opportunities like this for people to get together in a virtual space is a good first step to get in on the metaverse and begin engaging with customers in this new way. A special type of NFT called a Proof of Attendance Protocol, or POAP, is another easy activation related to events. These can be given away to people who do not have a wallet yet, and they are free.

Though these are new ideas, many facets are at least known in healthcare and are no longer so far ahead that we can't sprint to catch up. We just need to lean on our past experiences to figure out how to push what we have already achieved just a bit further into new spaces and new opportunities. All it will take is a bit of reimagining and a dash of courage.



REFERENCES

1. PwC 2022 US Metaverse Survey. Available at: <https://www.pwc.com/us/en/tech-effect/emerging-tech/metaverse-survey.html>. Accessed January 2023.
2. Dentaverse: A Digital Community of Dentists Made Accessible via NFTs. Available at <https://blog.cryptoflies.com/dentaverse-a-digital-community-of-dentists-made-accessible-via-nfts/>. Accessed January 2023.
3. Amedis, Monetizing medical and scientific data through NFTs. Available at: <https://aimedis.com/exchange>. Accessed January 2023.
4. Kavya Pearlman on "How can we make the metaverse safe?". Available at: <https://xrsi.org/kavva-pearlman-on-how-can-we-make-the-metaverse-safe>. Accessed January 2023.
5. Vincent C et al., Provider experiences of virtual reality in clinical treatment. Available at: <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0259364>. Accessed January 2023.
6. Mohammad S. Robotic Surgery. Available at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3941295/>. Accessed January 2023.
7. Robot carries out operation by itself. Available at: <https://phys.org/news/2006-05-robot.html>. Accessed January 2023.
8. Sun T et al., The Digital Twin in Medicine: A Key to the Future of Healthcare?. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9330225/>. Accessed January 2023.
9. Unreal Engine. Available at: <https://www.unrealengine.com/en-US/metahuman>. Accessed January 2023.
10. The Mandalorian (Season 1). Available at: <https://www.ilm.com/vfx/the-mandalorian/>. Accessed January 2023.
11. Journee. The Beautiful Metaverse. Available at <https://journee.live>. Accessed January 2023.
12. DappRadar Says Decentraland has 650 Daily Active Users. Available at: <https://www.coindesk.com/markets/2022/10/18/dappradar-says-decentraland-has-650-daily-active-users/>. Accessed January 2023.
13. Daily active users (DAU) of Roblox games worldwide from 4th quarter 2019 to 3rd quarter 2022, by age group. Available at: <https://www.statista.com/statistics/1190309/daily-active-users-worldwide-roblox/>. Accessed January 2023.
14. Meta's social VR platform Horizon hits 300,000 users. Available at: <https://www.theverge.com/2022/2/17/22939297/meta-social-vr-platform-horizon-300000-users>. Accessed January 2023.
15. Meta's flagship metaverse app is too buggy and employees are barely using it, says exec in charge. Available at: <https://www.theverge.com/2022/10/6/23391895/meta-facebook-horizon-worlds-vr-social-network-too-buggy-leaked-memo>. Accessed January 2023.
16. CVS files patent to sell goods and healthcare services in the metaverse. Available at: <https://www.healthcarefinancenews.com/news/cvs-files-patent-sell-goods-and-healthcare-services-metaverse>. Accessed January 2023.
17. Virtual Day Experience at the Metaverse Summit 2022. Available at <https://events.economist.com/metaverse/metaverse-experience/>. Accessed January 2023.