AI in Action: Revolutionizing Scientific Congresses from Concept to Conclusion

Summary of Medical Affairs Professional Society (MAPS) London
Roundtable hosted by Hannah Tivey and Emma Winter on May 14, 2025

Roundtable participants

Catherine An, Strategy & Operations Director Medical Affairs, AstraZeneca
Clare Boothe, Medical Lead, Haematology & Nephrology, Alexion
Mariia Chernikova, Senior Global Insights & Analytics Manager, Ipsen
Pascal Vande Gucht, Head of Medical Digital Solutions, UCB
Joshua Leech, Medical Excellence Manager, AstraZeneca
Maria Kamimura, Head of Medical Effectiveness, Novartis
Catherine Singfield, Senior Medical Director, Jazz Pharmaceuticals

Disclaimer: The views and opinions expressed in this article are solely those of the individual and do not represent or reflect any official policies or positions of their employers.

Discussion Summary

At the MAPS London roundtable, Medical Affairs leaders gathered to cut through the AI hype and reflect on its real-world application across the congress lifecycle. While AI was hailed as "revolutionary" and "fast," the group acknowledged a shift from excitement to strategic scrutiny. Use cases spanned planning (agenda curation, stakeholder mapping), execution (AI notetaking, chatbots), and reporting (insight generation, personalised HCP follow-up). Yet, full integration remains elusive. Barriers include capability gaps, resource constraints, and motivational blockers, especially around ROI, and participants stressed the need for stronger AI literacy, governance, and cross-functional collaboration to move from pilots to enterprise-level transformation. A recurring theme was that success must be defined upfront, with metrics that reflect AI's true value. The consensus? AI is already reshaping congresses, but sustainable impact will require bold leadership, thoughtful change management, and a culture that balances experimentation with accountability.

From hype to hard truths: The real state of AI use in medical congresses

We convened a group of Medical Affairs experts from across the Pharma industry to explore the true reality of utilising AI for medical conferences. Our goal was to cut through the hype, assess where we are on the AI adoption journey, and share honest perspectives on what's working, what's not, and what lies ahead.

The roundtable opened with a candid assessment of where we are now. Words to describe AI included "revolutionary", "game-changing" but also "scary". One attendee noted that "AI is not the future. It is the present, and it's fast". But while AI has dominated headlines and high-level vision decks, the reality on the ground is more nuanced.

"AI is not the future, it is the present, and it's fast"

This explains why the moment of broad excitement seems to be giving way to a more strategic approach, with teams stepping back to reassess and question: Where is AI truly adding value? Which pilots deserve deeper investment? And how can we build sustainable, scalable AI strategies rather than one-off experiments?

Real-life use cases of AI across the congress lifecycle

What was clear from our discussions is that medical teams are already experimenting with using AI to support with congress-related activities. The group showed varying levels of maturity, with some just beginning to explore AI's potential, while others are actively piloting congress-specific tools. Perhaps unsurprisingly, none claimed to be fully integrating AI across the congress workflow, which reflects what we're seeing across the broader pharma industry.

During the roundtable, participants shared how they are actively exploring and applying AI tools across the congress lifecycle:

1. Planning: Smarter preparation through AI

Most of the discussion around planning focused on how AI is being used to support agenda development, session prioritisation, and stakeholder identification. Teams are experimenting with tools like ChatGPT, Microsoft Copilot, and AI agents to streamline congress preparation. These tools help to sift through dense congress agendas, highlight high-priority sessions, and identify key opinion leaders or relevant stakeholders and are reducing manual effort and accelerating decision-making ahead of the event

2. Execution: Enhancing efficiency and onsite experience

Several teams are using AI tools like Copilot and AI-assisted notetaking platforms to capture and summarise discussions in real time. Voice-to-text capabilities are proving especially useful for increasing efficiency, potentially reducing the need for large onsite teams by enabling remote access, transcription, and analysis of session content. Some organisations are also beginning to explore AI-powered tools at medical booths, such as medical information chatbots that can handle common queries from congress attendees

However, the group raised an important caution: there is a fine line between smart data capture and surveillance. There were concerns that attendees may perceive overly intrusive tools as "Big Brother"-like. Thoughtful implementation will be essential to ensure acceptance and avoid undermining engagement.

3. Reporting: Accelerating insights and personalising follow-up
In the post-congress phase, participants highlighted how AI is already helping to generate rapid insights and synthesise large volumes of data into concise, actionable summaries. This is speeding up internal reporting and enabling faster follow-up. The group also discussed the use of AI to coach MSLs on tailoring post-congress engagement with HCPs to allow for more personalised follow-up. Finally, the group highlighted the potential for AI to measure congress ROI, although this requires further exploration.

The implementation gap: Barriers to AI adoption
Many Medical Affairs teams reported experiencing 'analysis paralysis', feeling overwhelmed by the sheer number of potential AI applications, uncertain where to invest, or concerned about making the wrong choice. Others moved quickly into pilots, but without a clear understanding of what success should look like from the outset. In many cases, teams lacked the frameworks, benchmarks, or internal alignment needed to define meaningful outcomes, making it difficult to evaluate what worked and why, ultimately leading to doubts around ROI of AI.

During our discussion, three core themes emerged as barriers to meaningful AI adoption:

- **Capability gaps:** Including varying levels of AI maturity across teams, limited training resources, and knowledge gaps in understanding AI functionalities, interpreting outputs, and evaluating tool effectiveness. These challenges are compounded by the difficulty of tracking tool usage and effectiveness consistently across global and local levels, making it harder to share best practices or scale success
- **Opportunity constraints:** Lack of time and budget, integration issues with existing systems, siloed or restricted access to high-quality data, insufficient buy-in from leadership, compliance restrictions and data security concerns continue to hinder implementation
- **Motivational blockers:** Including skepticism around AI's tangible benefits, fear of making the wrong investment, and resistance to disrupting familiar ways of working. In some cases, there's apprehension about job displacement or losing control over decision-making

Capability	Opportunity	Motivation
• Level of AI usage varies a lot among teams • Field is moving so rapidly there is a lack of resources for implementation and training • Knowledge & skills gaps (understanding AI functionalities, data analytics, and interpreting AI-generated insights)	• Lack of time and budget • Difficulties integrating tools with existing systems • Restricted access to quality data due to silos or privacy concerns • Lack of endorsement, awareness and advocacy from leadership reduces organisational momentum • Strict compliance requirements and concerns over data security and ethics can hinder AI implementation	• Doubts about the ROI and tangible benefits of AI • Fear of potential mistakes or negative outcomes associated with AI usage • Comfort with existing processes and reluctance to alter routines • Anxiety about job displacement or loss of control over work processes

A particularly persistent challenge, and one that cuts across all three of these categories, is **measuring impact and ROI**. This remains one of the most debated and unresolved issues in Medical Affairs, and is especially critical in the congress setting, where investment and visibility are high. Teams often struggle to define success up front, and traditional KPIs rarely capture the full value of AI-driven activities. While AI itself may ultimately help solve this challenge by enabling rapid and scalable measurement, there's still significant work to be done to establish the right metrics, data sources, and analytical frameworks.

Looking Ahead: From exploration to transformation

Looking ahead, to truly transform how we plan, execute, and learn from medical congresses we need to shift from isolated experimentation to coordinated, enterprise-level enablement. It will not just be about choosing the right tools, it will be about embedding them effectively into the congress workflow. This requires a thoughtful change management approach that positions Medical Affairs as strategic leaders in AI transformation.

To make this a reality, several priorities must be addressed:

- **Building stronger internal capabilities and AI literacy:** What united the group was a clear recognition that Medical Affairs teams must be equipped with the necessary knowledge and skills to critically assess AI solutions, understand their limitations, and define appropriate use cases across the congress lifecycle
- **Creating clear governance structures** to ensure consistent guidance, ethical use, and alignment across global and local teams
- **Investing in cross-functional collaboration**, especially between medical, legal, compliance, and IT, to streamline tool evaluation, deployment, and measurement. As one attendee noted, there's a real need to "find a common language" when working with these stakeholders to avoid taking an overly cautious approach that slows progress

- **Defining success upfront:** Taking a strategic approach to measuring congress success that involves moving beyond traditional activity metrics to demonstrate value and impact
- **Fostering a culture of experimentation** balanced with accountability, where pilots are encouraged but guided by clear objectives

Conclusion

With the right mindset and infrastructure, AI can revolutionise how we approach medical congresses, delivering smarter insights, more tailored stakeholder engagement, and faster feedback loops. But the path ahead won't be without challenges, and real progress will require rapid upskilling, a culture of agility, and a willingness to rethink how we work. Those who invest now in building AI-literate, future-ready Medical Affairs teams will be best positioned to lead.

Interested in learning more about our approach to incorporating AI into your congress strategy? Let's talk.

At OPEN Health, we connect visionary minds, pioneering science, and advanced technology to drive real impact. By uniting people, science, and technology, we activate new opportunities for biopharma innovation. Our expertise across medical affairs and market access unlocks faster, smarter routes to market. We are committed to improving patient outcomes worldwide.

INTERESTED IN HOSTING A ROUNDTABLE?

This article summarizes a Roundtable hosted by a MAPS Partner Circle member that brought together leading experts from across the industry. If you are a solution provider interested in hosting your own Roundtable, please check out our Media Planner or contact Luke with MAPS: LTraeger@MedicalAffairs.org.