BGB | GROUP

THE ROLE OF TECHNOLOGY IN ENHANCING THE VALUE OF MEDICAL AFFAIRS

Streamlined processes, deeper insights, and what's next...

Thank you to the key contributors of this article:

Ashley Bormes | BGB Group
Francine Carrick, PhD | BGB Group
Amanda Eckel | BGB Group
Sami Hocine, PhD | BGB Group

Outlook for 2025 and Beyond

Pharmaceutical companies, like many other industries, are navigating increasingly dynamic environments subject to unprecedented rates of change and technological innovation. We recognize it is vital to adapt to and leverage emerging technologies that can fuel productivity and accelerate impact, but how each organization goes about this and the scale of the investment remains highly variable. At present, medical affairs teams continue to leverage traditional digital approaches and are critical to the digital transformation that is upon us, leading the integration of data-driven technologies to enhance scientific exchange, evidence generation, and strategic decision-making.

More than 60%

of **pharma companies have embedded AI** in some form within their commercial and marketing operations[1]

HOW CAN WE ENSURE MEDICAL AFFAIRS BENEFITS FROM COMPANY LEARNINGS?

Successful Implementations to Date

We are already seeing medical affairs leverage generative AI to assimilate a breadth of information to help inform strategies or take specific actions.

- **Workflow planning and project managements**

Certain organizations have developed solutions that help automate the project management component of launch planning or provide an aggregate view of numerous parallel activities.

Key consideration: *These enhancements represent a very modest capability improvement and fail to improve upon the strategic workload associated with the activity.*

- **AI-powered clinical trials**

AI supports efficiency, accelerates drug development, and enhances the overall trial process. It helps with protocol design, patient recruitment, data analysis, and safety monitoring, ultimately leading to faster and more effective clinical research.

Key consideration: *Because clinical trials represent immense investments and implications for patient safety, it is imperative to ensure proper stakeholder validation and ethical oversight occurs at every decision-making step.*

- **Information synthesis and predictive modeling**

ChatGPT-like technologies are capable of summarizing vast amounts of data and internal knowledge. Summary outputs can be helpful in identifying themes, driving alignment, and onboarding medical teams. Ultimately, we're all looking for ways to predict the future behaviors of our colleagues, organizations, and customers. Medical affairs has the opportunity to learn from consumer experiences that focus on capturing the breadth and range of insights that can appeal to a range of customer phenotypes by interconnectivity and exploring patterns.

Key consideration: *Many data sources (eg, MSL field notes) are unstructured and difficult to assimilate into summaries, and AI's ability to infer high quality actionable insights remains suboptimal, especially with free text field entries. Additionally, to protect confidentiality (eg, proprietary knowledge, patient information, etc), there are security risks and firewall needs associated that may limit use, induce a lag versus real world events, or pose an ethical risk if implemented.*

Using AI in clinical trials could lead to:

cost savings of **70%** per trial

timeline reductions of **80%**[2]

HOW CAN WE ENSURE MEDICAL AFFAIRS BENEFITS FROM COMPANY LEARNINGS?

Aspirations for the Future

We are hopeful that the next generation of medical affairs leaders are empowered by integrated solutions that link multiple tools to facilitate strategic alignment or enable the next best action to be identified in real time. The increasingly complex coordination associated with these endeavors can be rate-limited by the method in which pharma organizations upscale. In cases where larger investments are made to bring data scientist teams together in house, solutions can be more tailored to "talk to each other" on the backend. In cases where the organization is contracting solutions from outside providers, this task becomes more challenging.

• Evidence generation knowledge hub

Having an overview of all evidence generation efforts to capitalize on from a knowledge management perspective represents a major opportunity to enhance stakeholder alignment and evolve communication strategies in real time. This centralized repository could interact with other tools to ensure the broader evidence-generation strategy is aligned with the realities and needs of HCP beliefs and behaviors in clinical practice.

Key consideration: *Moving from simply tracking activities to identifying implications for actions and communication strategies remains a challenge for current AI models.*

• MSL digital assistant

Field medical can have numerous competing obligations but must remain focused on moving HCPs along a predefined knowledge continuum via their interactions. A digital assistant that helps them to organize their days and identify the "next best action" for each HCP interaction would represent a tremendous milestone in MSL operational excellence.

Key considerations: *While some organizations have a tool that facilitates identifying appropriate actions, the algorithm remains limited in effectively synthesizing numerous data sets to make the best decision. Crude assessing of HCP educational needs based on geography, practice size, or publication record may be feasible, however interpreting call notes to generate meaningful reactions often remains out of reach.*

Estimates from field force use suggest NBA implementation may drive

14x

greater consent/opt-ins from customers[3]

• Launch planning dashboard and risk mitigation

Complex strategic tasks like launch planning rely on a vast number of inputs, many of which are changing quickly (eg, competitor positioning, data readouts, etc). In many cases, time and resources are dedicated to scenario planning and risk mitigation strategies to optimize launch readiness within a dynamic landscape. A solution capable of analyzing both external environments (landscape, competitor set, geopolitical) and evolving internal knowledge (data, field insights, etc) and translating those into effective launch strategies would drastically cut down on the amount of work it takes to develop and constantly update launch plans. In an ideal world, this tool would be updated in real time, translate strategy into tactics, and include risk mitigation strategies gleaned from that organizations vast archive of past launch successes and failures.

Key consideration: *This is a highly complex and multifaceted solution – with a third party creating the algorithm, outcomes can be controlled. Further exploration is needed.*

RELEVANT ACTIONS TO EMPOWER MEDICAL AFFAIRS

At BGB Group, because of our vital role leading insight and evidence generation, knowledge dissemination, and HCP engagement, we advocate that medical affairs should be positioned at the forefront of technology upscaling within their organization. We provide 3 key recommendations to ensure your function is helping to guide the vision for tech enablement at the organizational level and ensure competency for each med affairs individual:

01 **Advocate for MA leadership to maintain visibility into the organizational vision for tech enablement and offer input into solutions that advance specific business goals**

02 **Request that end users (eg, field force) are brought into the development and pilot process to pressure-test tools and ensure relevancy for MA applications**

03 **Work to establish best practices and educational resources within your function via proactive change management**

Author Acknowledgments:
This white paper was written as an output of a roundtable discussion occurring during the MAPS EMEA 2025 meeting in London, UK. The views and experiences provided by the participating panelists represent their own personal views and should not be attributed to their affiliated organizations.

1. IQVIA, 2024.

2. https://www.scilife.io/blog/ai-pharma-innovation-challenges

3. https://www.iqvia.com/-/media/iqvia/pdfs/library/fact-sheets/nba_fact_sheet_final1_2025.pdf