

Navigating AI in Consumer Healthcare Advertising

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Introduction

There is scope for artificial intelligence (AI) to make huge contributions to healthcare across diverse areas such as diagnostics, patient engagement and public health. However when considering the impact on PAGB and our members it is vital to narrow the field of view, focusing our resources on where AI might make the most impact on our areas of expertise and the services we offer. PAGB has therefore sought to explore the impact of AI in consumer healthcare advertising, including the generation of content, compliance, regulations and the potential for AI tools to improve our services.

We have spoken to regulators, both national and overseas, and commercial organisations with expertise in the field to better understand the landscape and the development of relevant technologies. Most importantly, we have spoken to our members, conducting a survey and engaging one on one with companies already utilising AI. The results have been vital in helping us understanding the impact on PAGB members, and the opportunities AI presents.

AI as a creative tool

The potential for generative AI to have a substantial impact on the advertising industry was recognised early in the popularisation of large language models. These are a type of artificial intelligence trained on vast amounts of text using self-supervised learning, designed to

understand and generate human-like language for tasks such as writing, summarising, translating, and answering questions. They can also be used alongside image generation models to generate visuals from text prompts. While the use of machine learning in targeted and personalised advertising has been long established, this technology enables AI to be utilised in the creative elements of content creation.

Generative AI is currently being used by agencies and brands to generate ideas for campaign development, visuals at concept stage and for final ads, and variations on established claims. Discussions with members and a wider assessment of the industry indicates that this use will only continue to grow and develop as the models improve and output becomes higher quality.

Beyond large language and image generation models AI tools can also assist in the generation of new claims through the aggregation and analysing of data. This can be conducted by AI at an exponentially faster rate than possible through manual review and can utilise both clinical data and real-world evidence. This could prove incredibly useful both to assess whether proposed claims can be sufficiently supported, or recommending new claims based on the data inputted.

Guidance and regulations relating to AI

There is currently no legislation governing the use of AI in advertising in the UK. This sets us apart from the EU, where the AI Act became law in August 2024. Under the Act generative AI will have to comply with transparency requirements and EU copyright law, including disclosing certain content generated by AI, designing models to prevent them from generating illegal content and publishing summaries of copyrighted data used for training.

In the absence of specific legislation in this area, the regulation of AI in UK advertising falls to the same bodies that govern other aspects of advertising. The primary bodies in this area are therefore the Advertising Standards Authority (ASA), the UK's independent advertising regulator, and the Committee of Advertising Practice (CAP), the sister organisation of the ASA responsible for writing the Advertising Codes. While the Medicines and Healthcare products Regulatory Agency (MHRA) retains authority over the advertising of medicines and medical devices specifically, as the use of AI is a cross-industry issue the ASA and CAP are naturally taking this lead in this area.

There is no requirement for advertisers to disclose the use of AI in ads in the UK as standard practice, and guidance in this area focuses on ensuring consumers are not misled.¹ Rules relating to misleading claims and images apply no matter how the content is created, so members should ensure that any content that is generated by AI accurately reflects product efficacy and performance. Beyond this, the Incorporated Society of British Advertisers (ISBA) has created best practice principles for the use of generative AI in advertising for those who want to ensure they are utilising these tools in an ethical manner².

¹ <https://www.asa.org.uk/news/disclosure-of-ai-in-advertising-striking-the-balance-between-creativity-and-responsibility.html>

² <https://www.isba.org.uk/knowledge/advertising-industry-principles-use-generative-ai-creative-advertising>

Outside of requirements relating to consumer protections, it's advisable for advertisers to maintain awareness of copyright considerations. In December 2024 the Government launched a consultation regarding the application of UK copyright law in the training of AI models, though the outcome has yet to be published.³ Developments in this area may impact the AI industry longer term, but it is unlikely to have an immediate impact on the tools currently being used by PAGB members and stakeholders.

AI as a compliance tool

While marketers may be more excited by the creative opportunities presented by AI, regulatory bodies are exploring how AI can be used to improve industry compliance.

ASA

The Advertising Standards Authority (ASA) has taken the lead in utilising AI to increase the reach of its compliance work. Launched in 2023, their Active Ad Monitoring system captures ads from social media, search and display using a mix of public sources, the ASA's own internal monitoring tools and proprietary datasets. Machine learning models are configured to spot the ads that are most likely to be relevant to a given issue, or to have specific compliance problems.

For example, the system has recently been used to tackle high profile issues such as noncompliant claims to treat the symptoms of menopause and the promotion of prescription-only medicines (POMs). Using key words, such as the names of specific POMs, or combined high-risk term-like references to menopause alongside symptoms, the system can flag posts that potentially breach the rules. Human experts can then assess the output and confirm problematic examples for action. The system has proven effective at identifying ads at the extreme ends of the complaint spectrum (i.e. clear breaches or completely compliant ads), but it is less able to accurately flag ambiguous claims. The role of experts to make the final call in these cases remains a vital part of the process.

The Active Ad Monitoring system was the source of 41 published formal rulings in 2024, nearly 15% of the ASA's total output. Perhaps more significantly it was utilised behind the scenes to supporting the amendment or withdrawal of more than 30,000 ads via informal routes. This means where ads are in clear breach of an existing ruling the CAP Compliance team will contact advertisers and/or platforms directly to have the ad removed or amended. While this informal route gets little public attention, it usually results in a much faster withdrawal of problematic content.

The ASA is heavily investing in this area, with a staff of seven people in their data science team cooperating with the established traditional complaints, compliance and investigation teams. It shows the high level of investment required not just in technology but in human resource to deliver a system like this at scale.

MHRA

³ <https://www.gov.uk/government/consultations/copyright-and-artificial-intelligence/copyright-and-artificial-intelligence>

In their strategic approach to artificial intelligence, published in 2024, the Medicines and Healthcare products Regulatory Agency (MHRA) shared a pro-innovation outlook towards AI, noting the potential for it to improve regulatory efficiency, enhance patient safety and foster innovation. We are not aware of any advertising-focused projects ongoing at the MHRA, but PAGB continues to liaise with the regulator to understand the development of their AI-related work and the impact it may have longer term.

Beyond the UK

PAGB reached out to AESGP, the Association of the European Self-Care Industry, and other European trade associations seeking information on existing tools and ongoing projects in other countries related to advertising compliance and AI. While the majority of organisations did not report any AI related initiatives, a limited number of associations shared details of ongoing projects.

The Netherlands, unlike the majority of EU states, uses a pre-clearance model for consumer healthcare advertising, making it similar to the UK system and therefore a useful case study for PAGB. The Dutch Self-Regulatory Control Body for the Advertising of OTC Products (the Keuringsraad) currently uses an AI tool to monitor influence compliance, and is developing another tool to aid pre-clearance. Using a similar format to the ASA Active Ad monitor, though assessing speech as well as text, the influencer tool searches for problematic content via keywords and flags for the attention of the regulator. Of particular interest is the development of the pre-clearance tool. The end goal is for clients to be able to upload ads to the system for review; the content would then be flagged as approved, not approved or approvable with changes. Simple content could potentially be approved without human oversight, while it could provide preliminary comments for more complex submissions. The Keuringsraad hopes to have data from testing available in early 2026; PAGB intends to monitor the progress and effectiveness of this project, with the aim of determining whether a similar solution could be implemented within PAGB in the future.

ANEPF, the Spanish trade association, has also developed a bespoke compliance tool to aid in the review of copy. Materials submitted via the organisation's online portal are scanned by the programme before review by their team, highlighting potential compliance issues and proposing amends where possible. It utilises the large knowledge base ANEPF holds relating not only to regulations and guidance, but previous approvals. The team does not plan to remove human oversight at this time, or create an outward facing version of the tool, instead maximising the value of AI as a support tool to improve efficiency. It presents an alternative route to that proposed by the Keuringsraad, retaining expert review at all stages but establishing AI as an integral part of the process.

A different approach has been utilised by IGEPHA and NERES, the Austrian and French consumer healthcare associations. Both have launched custom AI chatbots to assist with queries for their small internal teams. The bespoke systems, based on ChatGPT, allowed the organisation to limit sources to their own documents or records from flagged reputable sources. This ensured responses excluded incorrect external material, leading to more accurate and reliable results. It also addressed concerns regarding confidentiality, allowing them to use internal documents without these being uploaded to open-source solutions. The chatbots have been made available for members to utilise as well but are currently in the early stages of being rolled out and promoted so there is limited data available in terms of how they are being used.

PAGB survey findings

Against this background PAGB conducted a survey to better understand our members plans and concerns regarding AI, and their perception of the likely impact on advertising within the industry.

A total of 21 responses were received, including submissions from 8 out of the 10 companies that are responsible for the highest volume of copy submissions to PAGB. Responses were also received from smaller companies and associates involved in the copy review process, providing a broad insight into the perspectives and practices of key service users. The data provided us with insights on how the landscape is likely to develop, as well as highlighting the many unknowns in this rapidly advancing area.

89% of full members said their advertising needs were likely to change over the next five years, with 79% predicting an increase in volume. This was most commonly attributed to an expansion of digital material, with technological advances such as AI being utilised to create increasingly personalised material.

14 of 19 full members indicated that they were either currently using or intended to use in future AI programmes to produce advertising content. Meanwhile only five of these had plans to use AI for compliance checks on the advertising content they produced.

While the majority of respondents stated that they were currently using or intending to use AI in future, at the time of the survey (April 2025) most were still exploring publicly available tools or were in the very early stages of adoption. The most commonly referenced programme was ChatGPT, and there were few mentions of bespoke solutions. Some members have limited the use of AI to generating ideas and concepts, while others are testing it for the creation of copy and images to be used in final ads. The types of copy being generated included social media posts, digital static materials and website articles. There was no indication that members were using AI to facilitate the creation of new claims from data review.

Compliance support is a more complex area, with bespoke tools likely to be required for meaningful results. The survey comments reflected optimism that AI could be used to conduct first pass checks if correctly trained, primarily as a supporting feature rather than replacing the need for a human review. However development of this technology is likely to require significant financial investment, as evidenced from PAGB's own discussions with developers in addition to survey feedback, with members individually working on tailor-made solutions due to the lack of open-source tools in this area.

Use of AI by PAGB

We asked our members if they were aware of any technology that could potentially be used by the PAGB Advertising team to improve our services. The three members who responded in the affirmative proposed the use of AI for initial compliance checks, but were unable to recommend specific tools that would meet the needs of PAGB for this purpose. One noted that while the currently available solutions might not be sufficiently advanced, it would be worth revisiting as the technology advances and becomes increasingly affordable.

The ASA Active Ad Monitoring system and proprietary AI used by social medial platforms to assist in content moderation and compliance were referenced as potential areas for exploration. However, the use of these content moderating systems was also flagged as a cause for concern by another member (see below).

Member concerns about AI

While AI was widely perceived as a useful tool, members also raised potential concerns about the use of AI by member companies, PAGB and platforms. The survey revealed several key themes that warrant consideration.

Human interaction and expertise

The importance of human interaction and staff expertise was referenced a number of times, with members highlighting the value placed on being able to develop relationships with PAGB staff and contact them with questions. The success of the meetings booking system since its introduction in 2021 demonstrates the value members place on collaborative working and in-person feedback, and it was considered vital that AI functionality within PAGB did not replace these important services.

Accuracy

Members expressed concerns about the accuracy of information generated by AI. This included worries about misleading health advice and inaccurate product claims, as well as the potential for inaccurate rejection of claims and content. The ability to mitigate these potential errors came back to the value of experts, both within members companies and at PAGB, to verify output and place it within context.

Confidentiality and data protection

It was highlighted that PAGB is party to a significant repository of confidential information regarding members. It is therefore vital that commercially sensitive data is kept within a secure system and not entered into any open AI systems. Information security was considered a top priority and comments strongly recommended that appropriate controls be put in place before any member data was fed into AI programmes.

Legal liability

Members questioned who would be liable if AI made a mistake, and how legal frameworks would evolve to address these issues. As noted above, there are ongoing discussions within Government about how to approach copyright in relation to the training of AI systems, and advertisers are as responsible for the output of AI as they are any other content they produce.

Inflexible use by platforms

While the systems used by social media were flagged as potential inspiration by one member, another flagged issues they were faced with media providers using AI to review compliance on ads. They noted that their ads had been blocked due to being inaccurately identified as promoting prescription-only medicines, and their team struggled to talk to a human contact at the company who could assist them. Other members have previously reported similar issues to PAGB. While using AI clearly serves a useful purpose here in preventing non-compliant ads, removing human review from the process reduces the ability for errors to be rectified.

When looking at opportunities for PAGB and our members to utilise AI, we have kept these concerns front of mind to ensure appropriate safeguards are in place so that AI is being used appropriately.

Opportunities for PAGB

Progress to date

PAGB has engaged with several AI solutions over the last year, informally trialling meeting agents, ChatGPT and Adobe AI Assistant while providing guidance to staff to ensure confidential data is not used in open-source programmes. An internal AI group has been established to promote information sharing and provide a dedicated space for ongoing discussions. The group has also supported with the creation of a comprehensive AI policy, designed to ensure that all tools are utilised responsibly and in line with best practices across the organisation.

Microsoft Copilot has emerged as the most effective AI solution trialled by PAGB so far. The platform maintains data privacy by not using prompts, responses, or accessed information to train foundational models; enterprise interactions are private and secure, enabling us to use PAGB data without confidentiality concerns. The ability to work with existing Microsoft programmes give it a wide scope of uses, and over the past year PAGB has trialled Copilot across five different functions, evaluating its potential to support various business activities. During this period the technology has improved significantly, with results becoming more accurate and a range of new functionalities released. To date it has been used to:

- Produce transcripts and minutes for meetings
- Summarise complex regulatory and government documents
- Help produce briefing documents based on PAGB strategy and papers
- Produce basic PowerPoint presentation from briefings
- Create different communications posts based on one central piece of content
- Search historical documents, chats and emails for relevant information

Next steps

The PAGB Regulatory and Advertising teams are now exploring how Copilot can be further integrated into daily functions, including the creation of a regulatory support agent which is currently in the early stages of testing. Agents within AI are systems that perceive their environment, make decisions, and take actions autonomously to achieve specific goals; in this case to aid intelligence gathering and monitor for ingredients issues.

For the Advertising team, Copilot has proved a useful tool in enabling staff to search past submissions, internal documents and online chats to locate previously approved claims. Moving forward the team is looking to refine this usage and consider the creation of an advertising-focused agent. We are also looking into the possibility of integrating Copilot with PAGB's CRM system to expand the data sets and improve functionality and accuracy.

PAGB has liaised with the external company used by IGEPHA and NERES to explore the option of a bespoke compliance tool. This was not currently feasible due to the high development costs, without guarantee of the quality of output. While we will continue to monitor technological developments, at this stage we do not see a bespoke compliance solution as a suitable option within PAGB. However, as members progress the development of their own systems there is scope for PAGB to work with the relevant teams to ascertain whether these could be suitable for supporting members to self-approve certain content.

PAGB chatbot/external agent

The consideration of chatbot solutions implemented by IGEPHA and NERES, together with ongoing internal development of a regulatory support agent, has prompted PAGB to examine the potential for an AI-powered programme tailored for members. A PAGB chatbot/agent would enable members to navigate the vast amount of information available in PAGB Codes, guidance, intelligence and briefings, providing near instant answers to simple regulatory, advertising and policy queries without waiting for PAGB or internal team responses. This proposed programme would operate similarly to platforms like ChatGPT or the standard Copilot chat function, but within a secure environment that only utilises PAGB approved sources to improve relevance and accuracy.

We see this tool sitting alongside our current contact points to answer quick and simple queries, saving time for members and resources within PAGB. Given the limitations of the current technology and the complexity of many of the queries we receive, the impact may be relatively limited initially but places PAGB in a position to develop the system and improve it over time. We see this as one of the first steps towards integrating AI into our services and ensuring PAGB is at the forefront of future advances.

Conclusion and key recommendations

The research conducted to date demonstrates that AI already presents opportunities to improve efficiency at PAGB and expand our support for our members. As the area continues to rapidly develop, we must remain agile and open to opportunities whilst fully scoping risks and ensuring that any technology adopted has quantifiable and cost-efficient benefits. To continue this development PAGB will:

- Pilot and refine AI solutions, such as regulatory and advertising support agents, with the aim of improving reliability, effectiveness and integration into daily workflows.
- Progress the assessment of a PAGB-specific chatbot or external agent, ensuring it draws exclusively from approved, secure sources and complements existing member contact points.
- Explore further system integrations, including connections with our CRM, to expand available data and improve the accuracy of Copilot internally.
- Maintain a close watch on technological and regulatory developments—both in the UK and internationally—to adapt and implement cost-effective, compliant solutions as they arise.
- Encourage ongoing collaboration with members and external partners to identify practical, scalable solutions, including the potential for member self-approval of certain content where appropriate.
- Recognise that while AI can expedite and enhance many processes, expert human review remains vital for upholding quality, accuracy, and compliance. AI is intended to augment, not replace, our team's expertise.

By following these recommendations, PAGB will ensure it remains at the forefront of technological advancement in advertising and regulatory compliance, delivering dependable and innovative services to our members while maintaining the highest standards of accuracy and accountability.