



An engagement paper on the effective use of Artificial Intelligence in NHS Communications.

Engagement runs from 2 December until 28 February 2024.

Help share your views in shaping our approach here:

https://www.nhsconfed.org/news/shaping-future-ai-within-nhs-communications

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Artificial Intelligence and Communication in the NHS: Engagement paper

Foreword

The NHS stands at the cusp of a transformative era in communication, driven by the rapid advancement of Artificial Intelligence (AI). In the context of a 21st-century NHS, as Lord Darzi's recent Independent Investigation into the NHS report implies, embracing new technologies - including AI - is crucial for addressing current challenges and improving overall system performance. AI offers communications professionals unprecedented opportunities to enhance engagement with staff, patients, and communities, potentially revolutionising the quality, efficiency, and accessibility of our health and care services.

As we embark on this journey, we recognise Al's immense potential and challenges. From chatbots providing round-the-clock information to machine learning algorithms analysing vast datasets, Al is already making its mark on NHS communications.

However, we must navigate this new landscape of opportunity thoughtfully, addressing ethical and social implications as well as technical and operational challenges.

We are incredibly grateful to the hundreds of NHS communications professionals who have taken the time to share their views on the use of AI over the last six months. This engagement paper now outlines a vision for integrating AI into NHS communications. We are inviting a wide range of stakeholders—from health professionals and researchers to industry partners and patient groups —to shape this future with us. Your insights will be invaluable as we strive to harness AI's potential while upholding our core patient-centred care and ethical practice values.

In the following sections, we explore Al's current state and future trends in communication, outline the benefits and challenges, present a vision and objectives, and detail five proposed actions.

We ask that you respond to the questions in this <u>survey</u>, sharing your experiences and perspectives. Your feedback will inform the development of an NHS Communications AI Policy and Operating Framework, which will be published in early Spring 2025. The framework will be used by NHS communicators nationwide, supported by a training programme delivered by our partners at NHS Confederation.

We are clear that AI is a tool to enhance, not replace, the human touch. This work aims to establish safe parameters and a framework for using AI in NHS Communications, where technology enhances our ability to serve, inform, and engage with patients, staff, and communities. By augmenting our efforts, we can provide better service to our staff, patients and communities by using the limited resources our teams have at their disposal more efficiently.

We look forward to shaping the future of Al and communication in the NHS with you.

Section 1: Vision, objectives, principles and values for Al in communication

Our vision for AI in NHS communications is ambitious yet grounded in our core mission: to empower NHS communicators with AI tools that enhance their ability to deliver impactful, efficient, and personalised communication strategies.

We see AI as a powerful tool to support the delivery of high-quality, safe, and efficient care, enabling more personalised and responsive services that meet the diverse needs of our communities.

To realise this vision, we've set clear objectives.

- To leverage AI to provide tailored, personalised communication that responds to the individual preferences of our staff, patients, and communities, as well as their needs and feedback.
- Use AI in communication to increase the accessibility, inclusivity, and equity of care by overcoming the barriers and challenges faced by staff, patients, and communities and supporting diverse and multicultural populations.
- Foster collaboration, coordination, and care integration by facilitating staff communication and cooperation across different settings, disciplines, and organisations.
- Empower and engage staff, patients, and communities by providing them with the tools, information, and opportunities to participate and co-create in the design, delivery, and evaluation of services.

Guiding our approach to using AI in NHS communications, we will adhere to the following principles and values:

- Human-Centred: Al can augment, but never replace, human communications.
 We will balance the human and digital aspects of communication and maintain
 the empathy, compassion, and rapport that are essential for effective and
 meaningful communication and that reflect the core values of the NHS.
- 2. Ethical: We will ensure the transparent and responsible use of AI in public communications, and ensure systems align with the values and goals of the NHS and the people we serve.
- 3. Inclusive: Al tools should help reach diverse audiences more effectively. We will address the potential biases and inequalities to ensure that any Al systems used are fair, transparent, explainable, and trustworthy and do not discriminate against staff, patients, or communities.
- 4. Privacy-focused: We will protect the privacy, security, and confidentiality of data and respect the rights and interests of staff, patients, and communities in the collection, use, and sharing of data in all Al-driven communication initiatives.

- 5. Innovative: Continuously explore and adopt cutting-edge AI technologies in communications and share these widely to achieve greater value for money at every step of the way.
- 6. Workforce: We recognise the need to support our communications workforce and provide comprehensive training and education, equipping our staff with the skills to work effectively with AI systems. We will work with our partners to ensure we have a robust programme in place.

Section 2: Al and Communication: Current State and Future Trends

Artificial Intelligence is the ability of machines or systems to perform tasks that typically require human intelligence, such as understanding language, recognising images, making decisions, and learning from data. All can be applied to various aspects of communication, such as generating, processing, analysing, and delivering information, as well as facilitating interaction and collaboration among different stakeholder groups.

It is rapidly reshaping the landscape of communication in healthcare. From natural language processing to machine learning, Al technologies open new avenues for the NHS to interact with staff, patients, and communities more effectively and efficiently. Some of the key technologies and applications in communication include:

- Chatbots and virtual assistants: These software programs can interact with users through natural language, either text or voice, and provide information, guidance, or services. They can handle routine inquiries, freeing up human communicators for more complex tasks.
- Content creation: Advanced natural language processing (NLP) tools can assist in drafting messaging, social media posts, and internal communications, maintaining an NHS organisation's voice and values.
- Automated media monitoring: Al can track and analyse media coverage in realtime, providing valuable insights for crisis management and reputation management.
- Personalisation at scale: Al algorithms can analyse audience data to tailor messages for different stakeholder groups, ensuring more relevant, engaging and impactful communication.

The use of AI in communication is expected to grow and evolve in the coming years as the technology becomes more sophisticated, accessible, and affordable and as the demand for more efficient, effective, and personalised communication increases.

Some of the possible future trends and developments of AI in communication include:

- Enhanced multilingual communication: Translation tools could ensure that NHS communications are available in multiple languages, across multiple platforms including video, making it easier to reach diverse populations and improving health equity at a fraction of the current time and cost.
- Storytelling: Advanced algorithms that can craft compelling narratives from complex data sets in a fraction of the time.
- Personalised patient communication: Analysis of data to send tailored health information, reminders, and appointment notifications. This could improve

patient engagement by delivering relevant information based on individual health needs and preferences.

These trends and developments are not exhaustive, and many other emerging and disruptive technologies and applications will shape the future of AI and communication. However, they illustrate the potential of AI in communication and the challenges and risks that need to be considered and addressed.

Section 3: Benefits, opportunities, challenges and risks of Al in communication

Integrating AI into NHS communications presents a wealth of opportunities to enhance our services. It can break down barriers of language and accessibility, making our services more inclusive. Furthermore, AI can facilitate better collaboration among staff and empower patients and communities to take a more active role in their health and care. Some of the benefits and opportunities that AI can offer include:

- Enhanced efficiency: Automating routine tasks allows communicators to focus on strategy and creativity.
- Data-driven decision-making: Analytics can provide deeper insights into audience behaviour and campaign performance.
- Improved crisis communication: Monitor potential issues and respond rapidly during emergencies.
- Personalised stakeholder engagement: Tailored messages to specific audience segments, increasing relevance and impact.
- 24/7 communication capability: Chatbots can provide round-the-clock information to patients, staff and stakeholders.

However, with these opportunities come significant challenges and risks that we must address head-on, including the following:

- Ensuring the safety, quality, and reliability of AI systems is paramount. We must implement robust design, development, testing, and evaluation methods and establish clear standards and guidelines for performance and accountability.
- Data privacy and security are critical concerns. As we harness the power of AI, we must use encryption, anonymisation, and consent mechanisms to protect sensitive information, always complying with relevant data protection laws and regulations, such as the General Data Protection Regulation (GDPR) and the Data Protection Act 2018.
- Ethical considerations are at the forefront of our approach. We are committed to developing AI systems that are fair, transparent, explainable, and trustworthy. This includes addressing potential biases and inequalities, ensuring diverse representation in both development and deployment.
- The impact on our workforce. We will provide comprehensive training and support to equip our communication staff with the skills needed to work effectively with AI systems, fostering a culture of innovation and collaboration.
- Balancing the human and digital aspects of communication, maintaining the empathy, compassion, and rapport essential for effective and meaningful

communication and ensuring the choice and consent of staff, patients, and communities in the use of AI systems.

As we move forward, we must carefully navigate these benefits and challenges, always keeping the needs of our patients, staff, and communities at the heart of our decisions.

Section 4: Actions and Initiatives

We have developed a comprehensive action plan to translate our vision into reality. This section outlines the actions and initiatives we plan to implement to achieve our vision and objectives. We also describe the governance and evaluation mechanisms that we will implement to ensure accountability and transparency of our AI systems and practices.

- Action 1: Develop a national operating framework for using AI in communications across the NHS, collaborating with key stakeholders such as staff, patients, communities, regulators, and industry partners. This framework will define our goals, priorities, and standards and align with key NHS strategies alongside the Government Communications Service generative AI policy.
- Action 2: Establish an NHS AI communication innovation hub. This centre of
 excellence will serve as a platform for collaboration and knowledge exchange,
 supporting technical development, testing, and deploying innovative AI
 communication solutions and providing guidance, training, and resources for
 NHS staff and organisations on best practice.
- Action 3: Establish an NHS Communication AI community of interest group a
 collaborative network of peers from various backgrounds and organisations
 who can connect, think and learn with practical insights and feedback on
 approaches that will help NHS organisations improve how they communicate
 using AI with staff, patients and communities using an evidence-based
 approach to tackling systemic issues.
- Action 4: Create an AI communication ethics framework. This will set out the
 principles and values guiding our use of AI, addressing crucial issues such as
 data protection, privacy, consent, fairness, transparency, and human oversight.
 This framework will be informed by the NHS Code of Conduct for Data-Driven
 Health and Care Technology, NHSX AI Ethics Initiative and Government
 Communications Service Framework for Ethical Innovation.
- Action 5: Implement an AI communication monitoring and evaluation system.
 To ensure accountability and continuous improvement, this system will measure and report on the performance, outcomes, and impacts of our AI communication systems and practices using a range of indicators and methods. We will use this to update our policy and operating framework. Our work will adhere to the NHS AI Lab's AI assurance framework and the NHS Digital's Data Quality Maturity Index.

We invite your feedback on these proposed actions by completing this <u>survey</u>. Your insights will help shape the implementation of these initiatives, ensuring they meet the needs of all our stakeholders.

Section 5: Conclusion

As we stand on the brink of this AI-driven transformation in NHS communications, we recognise the magnitude of both the opportunities and the challenges ahead. This engagement paper represents our commitment to navigating this new landscape thoughtfully and collaboratively. It is not intended to be perfect or finished article.

This is just the beginning of the conversation. We recognise that this is an ambitious and evolving agenda and that we need help to do it.

We now turn to you to help shape this future. Your views will be invaluable as we refine our approach and develop our final policy. We encourage you to engage with this document and share your thoughts on our draft ethical framework https://www.nhsconfed.org/news/shaping-future-ai-within-nhs-communications.

The future of AI in NHS communications is certainly not predetermined. By working together, we can harness the power of AI to enhance our communication, improve our services, and, ultimately, better serve the health and well-being of all.

We look forward to your contributions as we embark on this journey together. Together, we will ensure that the NHS remains at the forefront of ethical, effective, and patient-centred healthcare communication in the age of AI.

NHS Communications AI Taskforce

Appendix One: First Draft Ethical Framework for Using Al in NHS Communications

This framework outlines the ethical principles and practices that will guide the use of AI in NHS communications. It aims to ensure that AI systems that NHS Communication uses are developed and deployed responsibly, respecting the rights and interests of all stakeholders.

Fairness and Non-discrimination: Ensuring equitable and inclusive communication for all audiences. Design and test Al tools and systems to avoid unfair bias against all protected characteristics.

- Regularly audit Al-generated content for potential discriminatory language or imagery.
- Promote diversity in AI development teams to mitigate unconscious biases.
- Ensure AI tools support communication with diverse audiences, including those with accessibility needs.

Transparency and Authenticity: Ensuring AI decision-making processes are clear, maintaining trust through honest and transparent communication practices

- Disclose the use of AI in content creation when appropriate, ensuring it aligns with NHS voice and values.
- Explain Al system outputs clearly, in line with the UK Government Data Ethics Framework.
- All systems should be transparent in their operations, with clear documentation of decision-making processes.
- Maintain authenticity through human in the loop processes in Al-assisted stakeholder interactions.
- Offer options for non-Al communication alternatives where feasible

Accountability and Governance: Establishing clear responsibilities and editorial oversight for AI systems and generated content.

- Define clear lines of responsibility for AI system decisions and outcomes and editorial guidelines for AI-assisted content creation, ensuring that human oversight is maintained at all stages
- Implement a robust governance structure and review process, including impact assessments and ongoing evaluation.
- Align with the UK government's Guidelines for Al procurement and the NHS Al Lab's Ethics Initiative, which emphasises human rights, safety, fairness, accountability, and privacy.

Data Privacy and Information Governance: Safeguarding personal information in communication processes.

- Adhere to GDPR and NHS information governance standards in Al-driven communications.
- Implement secure data handling and strong encryption practices for AI systems used in communications, with strong encryption for data at rest and in transit.
- Ensure AI tools respect patient confidentiality and staff privacy, including clear anonymised protocols and robust access controls.
- Patient data used in AI systems must be handled with the highest privacy and security standards, complying with all relevant data protection laws.
- Al systems should be designed to minimise data collection, retaining only the necessary information to achieve their intended outcomes.

Ethical content creation and curation: Ensuring AI-assisted content aligns with NHS values and communication objectives.

- Al should be applied ethically and in accordance with the NHS's values, prioritising patient welfare above all else.
- Continuous ethical review should be conducted to assess Al's impact on patient care and adjust as necessary.
- Ensuring Al-assisted content aligns with NHS values and communication objectives.
- Develop guidelines for the ethical use of AI in content creation and curation, respecting copyright and intellectual property rights.
- Implement safeguards against the creation or spread of misinformation by ensuring a human in the loop approach.

Continuous Learning and Improvement: Adapting AI use in communications based on feedback and emerging best practices.

- Al systems should be regularly reviewed and updated to reflect new ethical standards and guidelines, technological advancements, and stakeholder feedback.
- The NHS should promote a continuous learning culture, ensuring that staff are trained in the ethical use of AI and understand its implications for patient care.
- Stay informed about advancements and best practices in AI for NHS communications.

Appendix Two: Engagement log

Date	Form	Audience	Summary	Actions
November 2023	London Comms Network event	Communications professionals in London NHS system	40 Attendees	Keep updated/informed
May to July 2024	London Comms survey	Comms professionals in London NHS system	92 responses	Responses informed the engagement paper
June 2024	London Comms network event; f2f presentation and workshop	Comms professionals in London NHS system	40 attendees	Keep informed
October 2024	NHS Providers comms event	Comms leaders from NHS provider orgs across England	45 attendees	Keep informed
October 2024	Shelford Group; f2f presentation and workshop	Comms directors	10 attendees	Keep informed