Freedom of Information Request: Our Reference CTMUHB_301_25

You asked:

We are requesting the following information in accordance with the Freedom of Information Act 2000:

AI system information

1. How many artificial intelligence (AI) systems does your trust/health board currently have in development?
2. How many AI systems are currently deployed within your trust/health board?
3. For every AI model currently being used or developed in your trust:

	AI system 1	AI system 2	AI system 3	etc.
3. For every AI model currently being used or developed in your trust:				
3a. Is the AI model being used operationally, clinically, or for another purpose?				
3b. What department(s) is the AI system being used in?				
3c. What month and year was the AI system first depolyed? (n/a if in development).				
3d. Was the AI system created by a commercial entity, university, in-house, or within another NHS trust? Please give the name of the organisation.				
3e. What is the AI systems architecture? (e.g. deep neural network, random forest, logistic regression, large language model).				
3f. Which coding language and packages are used to deploy the AI system? (e.g. python - scikit-learn, pytorch, tensorflow)				
3g. What is the nature of the input of the AI system? (e.g. a medical scan, free text notes, tables of lab results).				
3h. What is the nature of the output of the AI system? (e.g. a masked image, a risk score, natural text).				
3i. How was the AI system validated in the target population before deployment?				

3j. What measures are in place to monitor for degradation in the performance of the AI system post-deployment?				
3k. What was the cost to procure the AI model and what is the ongoing cost of use?				
3l. Which departmental budget is the cost paid from?				

Data management

4. Was any local patient data used for training or fine tuning the AI system?
5. Is any patient data collected specifically for the purpose of training any of the AI systems currently in development or deployment?
6. Do you share, or plan to share, any patient data with third-party developers for AI-related purposes? If yes, please provide details of the data-sharing agreement or relevant policy.

Regulation

7. What is the regulation and certification of the AI model under the European Union Medical Device Directive and/or United Kingdom Medicines and Healthcare products Regulatory Agency (MHRA)?

Patient/public involvement

8. Was any patient/public engagement undertaken before deployment of the AI system?
9. Is there any ongoing patient/public engagement input into the use of AI within your organisation?

Governance

10. Who has responsibility for the AI systems being using?
11. Does your organisation have a governance policy that covers:
11a. Use of AI systems within your organisation?
11b. Ongoing evaluation of an AI model's performance after deployment?
11c. How to monitor for bias in the AI system and how to mitigate against this?

Our response:

1. How many artificial intelligence (AI) systems does your trust/health board currently have in development?	0
2. How many AI systems are currently deployed within your trust/health board?	15

System	Dragon Medical One	IBEX Prostate & Breast AI	BRAINOMIX	Heartflow	BoneXpert	Gleamer	Azmed (Rayvolve)	Radiobotics	CTMUHB Libre AutoCoder	CTMUHB ED Attendance Prediction	CTMUHB CCLLM	Web facing Generative-LLMs such as Ollama, Mistral, ChatGPT	MS Co-pilot	Annalise AI	Qure AI
AI Functionality	AI-powered speech recognition and natural language processing for clinical documentation	AI used in digital pathology to assist in detecting prostate and breast cancer in biopsy slides	AI for stroke diagnosis and brain imaging analysis	AI-enabled analysis of CT coronary angiograms to create 3D models and assess fractional flow reserve (FFR)	Uses AI to automatically assess bone age from hand/wrist X-rays. CE-marked, widely used in paediatrics and endocrinology.	AI-powered tool for detecting fractures and chest pathologies (e.g. pneumothorax, nodules) on X-rays. Can be used as a "second reader" to support radiologists.	AI software that detects fractures on X-rays (especially trauma and emergency settings). CE-marked as diagnostic aid.	AI tools for musculoskeletal X-rays (e.g. knee osteoarthritis, vertebral fractures). Outputs structured reports and severity scoring. CE-marked and used across Europe.	AI-powered natural language entity recognition engine for clinical coding returns	LSTM-mixed model approach for the prediction of ED Attendances	LLM system to aide Clinical Coders with Clinical Coding Standards questions	AI for general-purpose reasoning, content generation, coding, and advanced problem-solving	provides AI-powered productivity assistance	A targeted AI tool for early detection and triage, primarily used in chest X-ray analysis for public health and radiology.	A comprehensive AI-assisted diagnostic tool for radiologists, primarily focused on chest X-rays (CXR) and non-contrast head CT scans.
3b. What department(s) is the AI system being used in?	All	Pathology	Radiology	Radiology/ Cardiology	Radiology	Radiology	Radiology	Radiology	All	Emergency Department	Clinical Coding	All	All	Radiology, ED	Radiology
3c. What month and year was the AI system first depolyed? (n/a if in development).	Jun-23	Sep-23	2023	Sep-20	Nov-24	Oct-24	Mar-25	Jan-25	May-22	Dec-21	Sep-24	Sep-24	Jan-25	May-25	Jul-25
3d. Was the AI system created by a commercial entity, university, in-house, or within another NHS trust? Please give the name of the organisation.	Nuance (Microsoft)	Ibex Medical Analytics	Brainomix Ltd	HeartFlow Inc	Visiana	Gleamer	Azmed	Radiobotics ApS	CTMUHB	CTMUHB	CTMUHB	Various (Open AI, Mistral)	Microsoft	Annalise.ai (commercial)	Qure.ai (commercial)
3e. What is the AI systems architecture? (e.g. deep neural network, random forest, logistic regression, large language model).	Deep neural network	CNN	CNN	Hybrid ML + CFD	Proprietary deep learning	CNN	CNN	CNN + Reporting	NER (BiLSTM/Transformer)	LSTM + regression	LLM	LLM	LLM	Deep neural networks	Deep CNNs (imaging)
3f. Which coding language and packages are used to deploy the AI system? (e.g. python - scikit-learn, pytorch, tensorflow)	Proprietary stack	TensorFlow, Keras	PyTorch	Custom tools	Proprietary	PyTorch	TensorFlow	Python	Python, Java	R & Julia	Python	Transformers	.NET + OpenAI	Likely Python + PyTorch/TensorFlow	Likely Python + TensorFlow /PyTorch
3g. What is the nature of the input of the AI system? (e.g. a medical scan, free text notes, tables of lab results).	Audio	WSI biopsy slides	CT/MRI	CT Coronary	X-rays	X-rays	X-rays	MSK X-rays	Free text	Tabular data	Coder queries	Free text	Free text, spreadsheets	CXR, chest CT images	Chest X-ray images
3h. What is the nature of the output of the AI system? (e.g. a masked image, a risk score, natural text).	Structured text	Risk scores, heatmaps	Annotated images, scores	3D models, FFR scores	Bone age, Z-scores	Fracture labels	Fracture detection	Structured reports	ICD/OPCS snomed in FHIR and csv codes	Predicted attendance	Natural text replies	Natural text	Summaries suggestions	Findings overlays, triage alerts	Risk scores, detection/ nodule flags
3i. How was the AI system validated in the target population before deployment?	Vendor validated	Clinical trials	Multi-centre validation	Regulatory trials	Published studies	CE trials	Clinical validation	CE validation	Ongoing validation	Ongoing validation	Ongoing validation	Open testing	Internal validation	Clinical trials, NHS/MGB validation	Pilots with screening & NHS Trusts
3j. What measures are in place to monitor for degradation in the performance of the AI system post-deployment?	Vendor QA tools	Vendor monitoring tools	Vendor monitoring	Internal QA	Internal QA	Vendor QA	Internal QA	Vendor QA	User feedback	User feedback	User feedback	User monitoring	Telemetry	Post-market surveillance, audits	Audit & pathway monitoring
3k. What was the cost to procure the AI model and what is the ongoing cost of use?	£495 per license	£30k pa	funding held by NHS Wales Performance and Improvement Service	Payment per study	£4,872	£0	£0	£0	£0	£0	£0	0	£212.46 per user per year	£0	£1
3l. Which departmental budget is the cost paid from?	Digital	NHS Wales Performance and		Cardiology	Radiology	n/a	n/a	n/a	n/a	n/a	n/a	n/a	Central corporate	n/a	n/a

		Improvement Service													
Data management															
4. Was any local patient data used for training or fine tuning the AI system?	No	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No	No	No
5. Is any patient data collected specifically for the purpose of training any of the AI systems currently in development or deployment?	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
6. Do you share, or plan to share, any patient data with third-party developers for AI-related purposes? If yes, please provide details of the data-sharing agreement or relevant policy.	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Regulation															
7. What is the regulation and certification of the AI model under the European Union Medical Device Directive and/or United Kingdom Medicines and Healthcare products Regulatory Agency (MHRA)?	CE-marked	CE-marked Class IIa	CE-marked	CE-marked, FDA-cleared	CE-marked	CE-marked	CE-marked	CE-marked	Not CE-marked	Not CE-marked	Not CE-marked	Not CE-marked	Not CE-marked	CE-marked	CE-marked
Patient/public involvement															
8. Was any patient/public engagement undertaken before deployment of the AI system?	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
9. Is there any ongoing patient/public engagement input into the use of AI within your organisation?	No														
Governance															
10. Who has responsibility for the AI systems being using?	Key Responsibilities														
Senior Information Risk Owner (SIRO)	Overall governance of information risks associated with AI; strategic oversight for safe AI adoption.														
Data Protection Officer (DPO)	Ensures data protection compliance; reviews DPIAs; member of AI assessment panel.														
Chief Clinical Information Officer (CCIO)	Responsible for clinical safety of AI systems; monitors clinical risk and performance.														
Information Asset Owners (IAOs)	Accountable for data and system-level risk; responsible for risk registers and compliance.														
Cyber Security Team / Board	Oversees technical assurance, threat monitoring, and mitigation of cyber risks related to AI systems.														
AI Evaluation Panel	Virtual multidisciplinary group that approves the use of AI systems, including representatives from the clinical professions, Digital, Clinical Safety, Information Governance.														
11. Does your organisation have a governance policy that covers:															
11a. Use of AI systems within your organisation?	CTMUHB presently relies on a suite of policies covering Information security, clinical quality and safety and information governance, but has recently completed internal consultation on an explicit AI Policy and assurance framework that covers:														
	Deployment of AI across departments and services														

	Legal and ethical use (e.g., Article 22 of UK GDPR)
	Data minimisation, algorithm transparency, DPIAs, and human review requirements
	Application to both in-house and procured systems
	This policy has yet to be approved by board so is being enacted based on the draft.
11b. Ongoing evaluation of an AI model's performance after deployment?	The AI policy and assurance framework sets out:
	Requirements in the AI Policy for human oversight and flagging mechanisms
	Section 8 of the AI Application Form which mandates post-deployment performance monitoring, KPIs, accuracy checks, and audit cycles
	Use of DTAC and Cyber Assessment Framework for continuous assurance and system recertification
11c. How to monitor for bias in the AI system and how to mitigate against this?	The governance framework requires:
	Completion of ethical risk assessments before deployment (Section 5 of the AI Application Form)
	Documentation and mitigation of bias based on age, sex, ethnicity, etc.
	Mandatory submission of evidence of fairness testing, diverse datasets, and algorithmic bias mitigation techniques as part of the AI evaluation process
	Supplier assurance aligned to Data Ethics Framework and DTAC ethical principles