TRUST POLICY FOR THE ACCEPTABLE USE OF ARTIFICIAL INTELLIGENCE

Reference Number POL-	Version 2		Status Draft		Author: Head of Information Governance
Version /	Version	Date	Author	Reason	
Amendment History	V1	November 2023	Emily Griffiths		t created as actioned by SDR
	V2	January 2024	Emily Griffiths	Red	raft following consultation
Intended Recipients: working with Trust data			Information Techr	ology	at work and contractors
Training and Dissemination: Intranet; incorporation into Information Governance training					
To be read in conjunction with: Records Management Policy, Information Governance Policy, IT Security Policy, Professional Codes of Conduct					
Group (Nov 2023), Pat Oversight Group (Dec	tient Readii 2023), with	ng Panel (Deo the Trust Info	c 2023-Jan 2024), ormation Governar	the in nce G	v and Disaster Recovery augural meeting of the Al roup (Dec 2023) and on Governance Oversight
Approving Body and Date Approved			IGCSDR to recommend for approval		
Date of Issue			April 2024		
Review Date and Frequency			1 year - April 2025		
Contact for Review			Head of Information Governance		
Executive Lead Signa	ature		Executive Chief I	Digital	Information Officer

Acceptable Use of Artificial Intelligence (AI) Policy

- Purpose: The purpose of this Acceptable Use of AI Policy is to establish guidelines for the responsible use of Artificial Intelligence (AI) technologies within this Trust, to ensure the delivery of high-quality healthcare services and beneficial use of technology while complying with relevant laws and regulations.
- 2. Scope: This policy applies to all employees, contractors, and third parties applying technology on the AI spectrum to UHDB's data, whether the AI is within UHDB or outside (e.g. a third party mobile or web application). The below definitions apply to AI in scope of this policy. Positions of responsibility within this policy are defined in the IG and Records Management Policies.

Term	Definition	
Artificial Intelligence (AI)	AI is the simulation of natural	
	intelligence by machines. This means	
	creating algorithms to classify, analyse,	
	and draw predictions from data. It also	
	involves acting on data, learning from	
Bias	new data, and improving over time. Unfairness that can arise from problems	
DIdS	with an algorithm's process or the way	
	the algorithm is implemented, resulting	
	in the algorithm inappropriately	
	privileging or disadvantaging one group	
	over another group.	
Training	The process of determining the ideal	
	parameters for an algorithm. During	
	training, a system reads in examples	
	provided in training data and gradually learns by adjusting parameters.	
Types of AI	Al can be described in different types ¹	
	including:	
	 Machine learning: algorithms that can learn from data e.g. image recognition. 	
	Deep learning: a branch of	
	machine learning using artificial	
	neural networks to gain	
	knowledge from data e.g. pattern	
	detection.	
	Natural language processing:	
	understand and process human	

¹ <u>7 Types of Artificial Intelligence That You Should Know in 2024 (simplilearn.com)</u>

 language and in various applications, including machine translation and text analysis. Robotics: engineering field where robots perform tasks automatically. Expert systems: designed to mimic human experts' reasoning and decision-making abilities e.g. medical diagnosis, financial planning.

3. Principles of AI: UHDB is committed to ensuring the ethical, responsible, and secure use of AI. The following principles guide the use of AI within our organisation:

3A. Governance of AI: Before any AI technology can be trained, trialled or made live at the Trust it must go through Trust governance processes covering AI as set by the Senior Information Risk Owner. AI technologies for clinical application or involving vulnerable individuals will be subject to closest scrutiny. Only with approval of the AI Oversight Group can AI technology be used. Before granting approval, the AI Oversight Group will consider compliance with all the following principles.

3B Patient-centric and rights respecting: AI applications should prioritise patient interests and support the delivery of high-quality healthcare services. Particular care needs to be taken to uphold individuals' rights, including the UK General Data Protection Regulation (GDPR) Right to Object to automated decision making with significant effects, the NHS' National Data Opt Out, and other patient rights including to confidentiality and individual autonomy.

3C. Data Security: High security must be kept around the data inputs and outputs of AI during storage, transmission, and processing. AI shall be run in house as much as possible, and only conducted offsite where the Trust retains controllership, intellectual property and is assured the destination is sufficiently secure and compliant with UK law including the Data Protection Act 2018 and NHS regulation.

3D. Transparency: Users of AI systems and patients should be aware of where AI is assisting in decision-making processes. The usage of AI will be recorded and explanations of AI-generated advice should be provided whenever possible.

3E. Accountability: Each AI technology will have an Asset Owner who is responsible for ensuring that it is used only by competent users for its approved purpose. Individuals and teams using AI will be accountable for their actions and decisions made by trained human users while using AI decision support. Services will retain

contingency to be able to revert to non-AI processing. An audit trail must be retained for the kind of record involved, in accordance with the Trust Records Management Policy.

3F. Evaluation and Validation: AI systems should be regularly evaluated for their performance, safety, and efficacy before and after implementation. The Asset Owner is responsible for ensuring this evaluation takes place and that usage is consistent with the intended purpose and the AI system's risk management plan.

3G. Fairness and Non-Discrimination: AI systems should be designed, trained, tested and used in a manner that ensures fairness, avoids discrimination, and does not reinforce bias. Rigorous testing needs to be undertaken to provide assurance that the AI technology will be fair to the populations and data characteristics at this Trust.

3H. Training and Competency: Staff using AI technologies must be adequately trained and competent to ensure their responsible and effective use.

3I. Minimisation: The most suitable technological tool in the AI spectrum shall be selected and using the least amount of data necessary. The data required and computational resource expended should be proportionate to the task and the assessed risks and benefits.

3J. Forbidden usage: AI technologies at the Trust should not be used for unauthorised research, commercial, or personal purposes or in any manner which would infringe other Trust Policies or could undermine the safety, security or reputation of Trust patients, staff or systems.

3K. Monitoring and reporting misuse: Any suspected or actual misuse of AI systems or breaches of this policy must be officially recorded by reporting to authorised Trust channels without delay. Anyone found to be in breach of this policy may be subject to disciplinary action. The Senior Information Risk Owner, delegated through each Information Asset Owner, is responsible for ensuring sufficient record keeping and proactive monitoring of data assets and AI technologies at the Trust to be able to demonstrate the Trust's compliance and to alert the Trust to any detected unauthorised usage of AI systems.

3L. Innovation: the use of AI in healthcare is rapidly evolving, and it is our duty to stay at the forefront of ethical AI practices to deliver the best possible care to our patients. This Policy will be reviewed at least annually and updated to reflect changes in regulations, technology, and organisational needs.