Emerging use of AI in social work education and practice:

A rapid evidence assessment of the literature

Sharif Haider, Gillian Ferguson, Ann Flynn, Jurgi Giraud and Jitka Vseteckova

September 2025

The Open University

Contents

Executive Summary

The rapid progress in artificial intelligence (AI) during the twenty-first century has the potential to revolutionise the fields of healthcare, social care, and social work. Social Work England the regulatory body for social workers in England, aims to understand the current evidence base on the use of AI in social work, both within the UK and internationally, in both social work practice and education. This rapid literature review is one of three initiatives undertaken by Social Work England to provide evidence of the benefits as well as the risks and challenges that this new technology poses in social work practice and education. Alongside this review, SWE commissioned empirical research to understand the direct engagement with social workers, social work employers, and social work education providers. This study aims to explore the use of AI in social work, the types of AI utilised, and its impact on professional standards. Additionally, this study examines potential risks such as bias, discrimination, and ethical issues that may arise when working with the public, the effect on social workers' confidence, and how employers and educators are supporting social workers and social work students.

AI has emerged as a transformative and disruptive force with potential to reshape social work practice and education. The integration of AI into social work practice and education presents both opportunities and challenges. It has begun to permeate social work practice and education, particularly in the context of generative AI. In the UK, generative AI is currently utilised to reduce manual typing of conversational notes, enhance case recordings, deliver better reviews and care plans, and improve data quality and security.

Although AI shows some potential benefits in administrative support and workflow improvement, it is not yet reliable in predicting risk and making decisions in children and adult's services. AI systems and tools are not a panacea or perfect. They may struggle with nuanced and context-based decision-making. The opacity of the output generated by some AI systems and tools raises concerns in social work, particularly regarding risk assessments and decision-making, transparency, accountability, and explainability. All these key principles are essential for delivering high-quality social work and maintaining public trust.

Lack of transparency undermines trust and accountability of AI systems and tools. Due to this, the use of AI in social work raises legal and regulatory concerns, including who is responsible for the decisions made by AI systems and tools. Furthermore, as social workers handle sensitive data, the privacy and security of AI systems and tools are of paramount importance. This review suggests that AI systems and tools could perpetuate and amplify existing biases if they are trained on biased data. To address these challenges, there is a need for clear policies, regulations, and guidelines related to data governance, privacy, algorithmic transparency, and accountability.

AI could be integrated into social work education to enhance teaching, research, and student learning. It can assist in redesigning curricula, generating teaching materials, enhancing the learning process, providing personalised learning experiences and timely feedback on students' assignments, as well as assessing students' performance. Additionally, AI-powered simulation can support social work students in dealing with real-world scenarios before they

start practising in a safe environment, and the learning can be tailored to meet the needs of the students. There are several challenges to integrating AI into social work education. That includes ethical concerns, pedagogical issues, and practical integration and implementation difficulties. These challenges are significant because social work is a person-centred and relationship-based profession. The introduction of AI fundamentally changes how practitioners interact with people and make decisions.

A responsible approach to AI is what is needed in social work, ensuring transparency, accountability, and fairness and aligning with the values, ethics, and principles of social justice that underpin social work. To develop responsible AI systems and tools, policymakers, employers, AI developers, social workers, and individuals with lived experiences of social work need to work collaboratively. They need to be involved from the initial design stage through to the evaluation and review of AI systems and tools.

The executive summary presented above is based on a rapid assessment of the literature concerning the use of AI in health, social care, and social work practice and education. The review outlines its focus and methodology, along with a summary of the findings from the literature assessment. This summary provides an overview of the current state of AI in social work practice and education, along with associated recommendations for Social Work

Introduction

Artificial Intelligence (AI) has the potential to disrupt and transform every aspect of society. It is not a new concept - the term was coined in 1956 - and relates to the development of intelligent machines which perform tasks like humans or at least replicate some form of human intelligence. Increased computing power, data availability, advancement of algorithms, architecture and investment are driving the rapid progress of AI and its capabilities. The release of ChatGPT in November 2022, a specific type of generative AI, showed the world the possibilities of AI on a large scale. ChatGPT is a large language model (LLM), which has the ability to generate new texts in a conversational format. Also, it can generate images, music and code. Since the launch of ChatGPT, other generative AI tools have been made available to the public, including Copilot, Claude, Deepseek, Grammarly, and Gemini.

Although generative AI is a recent development there are already different types in common use, such as rule-based or traditional AI, machine learning (ML) and deep learning. Currently some local authorities in the UK are using Magic Notes and Copilot (Stephenson & Samuel, 2025). Magic Notes is an AI-enabled tool which allows social workers to use their phones to record and analyse face-to-face meetings and generate assessments of people accessing services (BBC, 2024). Magic Notes can help social workers write summaries, recommend follow-up actions, and draft letters instantly. Social workers and their line managers are then required to check any documents for accuracy. Magic Notes utilises AI algorithms made by Deepgram and OpenAI (Koutsounia,

2024a, 2024b). BEAM, the company that developed this tool, claims that by using it, social workers can engage more deeply with people in need. That means they can spend more time on face-to-face interactions and building relationships (BBC, 2024).

Relationship-based work, which focuses on building strong and trusting engagement and connection between care providers and individuals receiving support, is vital in social work. The quality of these bonds matters because they impact outcomes for individuals. These outcomes include improving health and functioning, increasing wellbeing and enhancing satisfaction with services. However, social workers in the UK can face numerous barriers to developing good relationships and providing adequate support. Research shows that many social workers are exposed to traumatic material, role conflict, and poor interprofessional relationships, which cause siloed working cultures and challenges in providing good quality services (Jolly, 2018; Lacey & Moran, 2024).

It has been reported that social workers experience the highest level of stress. In particular, child and family social workers regularly exceed their contracted hours, to carry out their roles (Local Government Association, 2025; Samuel, 2024). Research by Ravalier et al. (2023) and Zhumataeva (2023) indicates that social workers regularly manage excessive caseloads but receive insufficient support from management, contributing to stress and burnout and ultimately negatively impacting their health and well-being and affecting job satisfaction. Undoubtedly, poor working conditions contribute to retention issues and recruitment difficulties nationwide. One in 10 adult social worker jobs in England

is vacant, and the Department of Education (2024) assessed the risk of vacant child and family social worker positions as 'critical' because 2023 had the second-highest vacancy rate since 2017 (Booth, 2024). Furthermore, research by Ravalier (2021) on working conditions and wellbeing at the local level in the UK, focusing on seven local authorities, suggests that stress is one of the main factors often associated with demands arising from workload, contributing to social worker burnout, depersonalisation, and job dissatisfaction. Ultimately, the quality of service to vulnerable adults, children and their families suffers due to this.

In this context, AI tools such as Copilot and Magic Notes, could support social workers by minimising administrative burdens. There are wide claims that AI has the potential to revolutionise the health and social care sector, including social work (Alowais et al., 2023; NHS England, 2023). There is also widespread conversation across the social work sector about the positive and negative implications of AI for education and professional practice. Like social work practice, AI has the potential to transform social work education by improving students' learning experiences, streamlining administrative tasks, and preparing social work students for modern challenges in the profession (Haider, 2024). It is therefore vital to explore the way AI is already influencing and likely to influence social work in the future. This report provides a summary of the findings from this rapid assessment of the literature to highlight an overview of the current state of AI in social work practice and education with associated recommendations for Social Work England.

Methods

This study employed a Rapid Evidence Assessment of the Literature (REAL) approach (Crawford *et al*., 2015). This is a comprehensive and structured search strategy based on predefined keywords, Boolean logic[1], and phrase searching. The aim of this review was to better understand the role of AI in social work education and practice. The literature search also explored works from various professional domains, including health and social care, both in the UK and globally. These disciplines intersect with social work and offer valuable perspectives on ethical considerations, policy implications and regulatory compliance. It was envisaged that where there were gaps in social work specific literature, health and social care evidence could provide direction and vision for future development in education and practice. A series of key questions guided the assessment of the literature:

AI in Health and Social Care:

1. What is the evidence of AI use across health and social care, including incidence and emerging issues in practice and regulation?

[1] Utilised keywords AND, OR, and NOT to combine and refine search terms.

2. What are the biases and risks of discrimination in AI software and systems?
3. How do aspects of informed consent, trust, and transparency affect the use of AI with service users and the public?
4. What are the issues around data protection and confidentiality when using AI with service users and the public?
5. How is AI used in education and training for regulated professionals in health and social care?

AI in Social Work Practice and Education:

1. What are the ethical implications of using AI in social work?
2. How does AI impact decision-making and accountability in social work?
3. How is AI use in social work managed by regulators, professional bodies, or employers?
4. How do education providers approach AI in social work courses?
5. What are the applications, opportunities, challenges, governance, and risks of AI tools in social work practice?

Inclusion criteria and screening process

The review used the following inclusion criteria:

Studies on AI in health, social care, or social work both in the UK and internationally

Literature addressing ethical, regulatory, educational, or practical implications

Empirical research, policy papers, evaluations, or systematic reviews

Publications from 2010 onwards with abstracts available in English

Studies meeting the inclusion criteria were extracted for each research question along with their abstract and metadata, including authors, title, year of publication, DOI, keywords, and source. The screening and selection of articles followed the recommended procedures of the PRISMA protocol (Page et al., 2021). The screening process was twofold:

1. Title and abstract screening were performed independently by two reviewers. Discrepancies were resolved through consensus or arbitration by a third reviewer.

2. Full-text screening was conducted by a single reviewer based on relevance to the research questions.

Exclusion criteria

Editorials, opinion pieces, commentaries, abstracts from conference proceedings and protocols were excluded from this review. Articles that did not specifically focus on health, social care, or social work related to AI or AI-related algorithms were excluded. In addition, non-English publications were not included in this review.

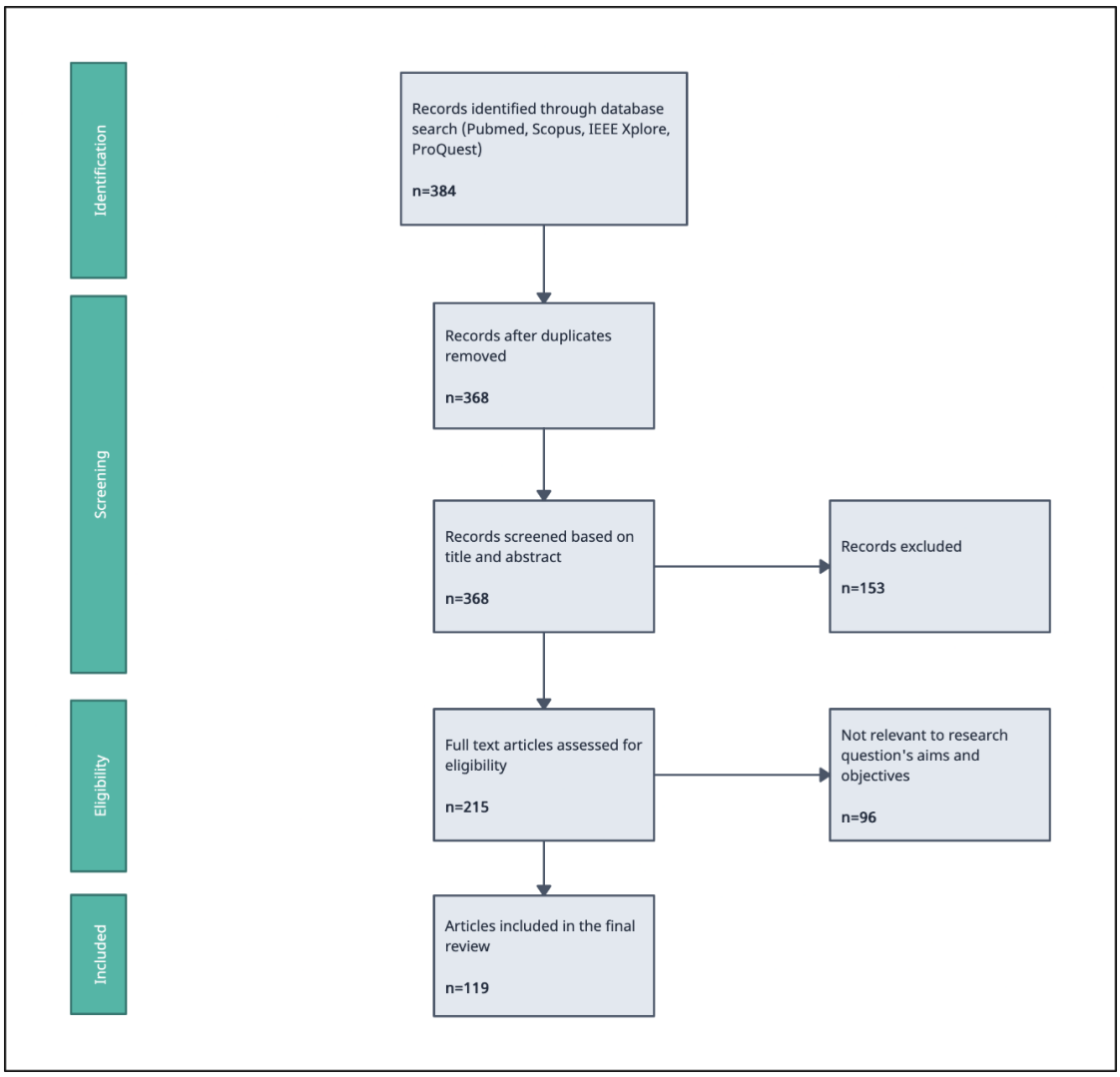
A spreadsheet for data extraction was created, and the PI and co-investigators completed the initial round of data extraction from a set of peer-reviewed articles and grey literature. Information such as the year of publication,

Table 1: Seven themes related to the opportunities and challenges and risk of AI in social work practice and education.

author(s) of the publication, study aim, design, sampling method, measurements, and main findings was extracted from each article.

The search resulted in 384 papers which were screened according to the protocol, 265 were excluded through this process, leaving 119 full-text articles for review. Furthermore, 44 grey literature resources were critically appraised and included in the review. The majority of peer-reviewed articles (95%) reviewed here were from health disciplines. Therefore, grey literature was utilised to understand the current state of AI in social care and social work. Of the 119 studies identified, 64% originated from the United States and Canada, 17% from the UK and Europe, 11% from Asia, and 8% from Australia and New Zealand.

Figure 1 indicates the number of studies which went through each screening process as well as the final number of studies included in the review.



At first, team members created 39 analytical and descriptive themes from their analysis. The principal investigator (PI) then reviewed these themes, removed duplicates, and organised them to ensure that the findings matched the review questions. Through an iterative process of reading, re-reading and reviewing articles and discussions with people with lived experience and practitioners, seven main analytical themes related to the questions of this review were identified (Table 1).

Table 1: Seven themes related to the opportunities and challenges and risk of AI in social work practice and education.

1. AI in social work intervention
1.1 Risk assessment and decision making
1.2 Early interventions and prevention
1.3 Service provision
1.4 Quality control and improvement
1.5 Administrative tasks
2. Efficiency, accessibility and reduction of costs
3. Ethical challenges of AI
3.1 Data use, security and privacy
3.2 Bias, fairness and discrimination
3.3 Transparency, trust and explainability
3.4 Accountability and responsibility
4. Integration and implementation of AI
4.1 Internal factors
4.2 External factors
5. Governance and regulation of AI
6. AI social work training and education
6.1 Personalised learning, access and support
6.2 Administrative efficiency
6.3 Preparing for digital futures
6.4 Assessment and curriculum redesign
6.5 Ethical and relational concerns
6.7 Disruption of traditional roles and practices
6.8 Digital divide
7. Importance of humans

To increase the relevance and improve the quality of this literature review, people with lived experience of using social work services were involved. Three people with lived experience were involved in the research process to ensure that this literature review addresses what truly matters to those affected by the use of AI by health and social care practitioners. They were recruited from the Open University 'service users and carers group'. Initially, the project was advertised to all group members, and three individuals with experience in social work and AI expressed interest in working with the project. Three virtual meetings and one in-person meeting were scheduled with them at various stages of the project, including before the search, during the generation of themes and subthemes, report development, and after the report had been completed. The meetings lasted roughly 1 to 1 hour and 15 minutes each. The principal investigator of the project also regularly engaged with them via email to gather their views and perspectives on specific ideas identified from the literature search. These lived experience experts advised on the themes generated by the literature review and the recommendations developed from the literature review. They also helped to create the search strategies. Their comments strongly aligned with the findings of this review, notably the issues that AI presents to social work. They highlighted several ethical issues, including data privacy and confidentiality, biases, discrimination, transparency, and informed consent. They believe that maintaining trust and upholding moral standards is essential for the responsible use of AI in assisting individuals who require social work services. In addition to these challenges, they expressed a keen interest in the potential of AI to provide personalised care to individuals.

Involvement of Practitioners

Seven social workers and one project manager - responsible for overseeing the integration and implementation of Magic Notes within a local authority - contributed to the delivery of this literature review. They met the research team after the themes and recommendations had been generated. The meetings lasted roughly 1 to 1 hour and 15 minutes. Participating social workers were recruited from the Open University 'employers' group'. This group includes representatives from local authorities and voluntary organisations who sponsor employees to study for the social work qualification with the Open University. After advertising the project, eight respondents who were involved with AI in their organisation volunteered to participate. The feedback from the practitioners helped ensure that the themes and recommendations drawn from the literature review connected with their real-world experiences. Each of the participating practitioners had practical experience using generative AI tools like Copilot and Magic Notes in their workplaces. Their insights enabled the review team to pinpoint gaps in social work practice. A focus group involving these practitioners facilitated the research team in identifying the most pressing challenges and opportunities, as well as understanding the realistic impact of AI on their day-to-day work. All of them highlighted that practitioners who are part of the pilots have mixed feelings about the system they are utilising; their primary concern is the inability of the AI system to detect 'something not said' (E_SWE_5) in the meeting with people who need or receive services, which is non-verbal language and context. They are also worried about their autonomy and feel unable to fully utilise professional curiosity when

AI is in use. They were concerned about three specific areas where they think policymakers as well as organisations, need to prioritise to integrate and implement an AI system:

- Social justice and ethical matters such as privacy and consent.
- Transparency, trust and accountability
- Displacement of the social work role.

Results

This evidence synthesis offers a review of literature from the fields of health, social care, and social work, aimed at exploring the opportunities and challenges of AI in social work practice and education. The findings of th1is review are organised into seven identified themes as noted earlier in Table 1.

1.0 AI in social work intervention

AI is poised to significantly impact social work intervention in multiple ways, including streamlining administrative tasks, predicting and aiding in social work decision-making. This review identified five subthemes under this theme:

1.1 Risk assessment and decision-making

Some AI-powered tools have the capability to make predictions about the future by analysing past and present data, which social workers can utilise to identify risks, predict events and outcomes (Gillingham, 2017). As a consequence, social workers are enabled to allocate resources more effectively. Currently, generative AI is primarily utilised in the UK to reduce the perceived administrative burden on practitioners, focusing on tasks such as note-taking and generating case notes, rather than predicting and assessing risks. The literature review suggest that AI-powered tools can be utilised to support social workers in making decisions, and there is a common theme in the literature that machine learning tools can be used to improve decision-making in health and social care (Devlieghere *et al*., 2022; Goldkind, 2021; Keen *et a*l., 2021). AI tools can simplify decision-making (Devlieghere et al., 2022), enable social workers to justify their decisions and reduce fault susceptibility (Gillingham, 2013, 2019). In contrast, Clayton *et a*l. (2020) conducted a study spanning 18 months in four UK local authorities on the application of machine learning to children's services. They developed models using machine learning to predict eight outcomes for individual cases, all of which focus on key stages in children's journeys where social workers need to decide whether to intervene in a case; if so, the level of intervention required; also, to predict whether the case will escalate in the future. Clayton et al. (2020) found that models developed using machine learning techniques did not work well in children's social care. The model failed to identify, on average, four out of every five children at risk. When the models

flagged a child as being at risk, they were incorrect six out of ten times. They concluded that the models they developed did not work well, but that does not mean machine learning will not work in the future. In their report, they highlighted several challenges of using machine learning in children's social care. For example, due to the reliance on a vast number of historical datasets to predict risks and make decisions, AI-powered systems or tools could produce inappropriate, discriminatory, and biased outputs (L. Li *et al.*, 2025). There is a risk that outputs generated by AI may be algorithmically biased and not representative of marginalised groups. This matter will be further discussed in the 'Ethical challenges of AI for social work' section.

1.2 Early interventions and prevention

This review suggests that predictive risk modelling or predictive analytics and automated case management systems may be helpful for social workers to intervene early to provide preventative services (Coulthard *et al.*, 2025; Nuwasiima *et al.*, 2024; Robila & Robila, 2020). For example, Gwadz & Ritchie, (2022) reported that social work researchers in the USA were utilising AI to enhance HIV prevention programmes for homeless youth. Furthermore, by using predictive analytics and machine learning it is possible to identify at-risk populations and facilitate early interventions and prevention (Dey, 2023; Gillingham, 2016; L. Li et al., 2025; Nuwasiima et al., 2024). AI-based predictive risk modelling uses large amounts of administrative data to train algorithms. This model detects correlations between various factors and adverse outcomes, such as child abuse. Assigning risk scores is essential for predicting which

children or adults are most vulnerable. The results of this model enable practitioners to target preventative services and intervene early. However, for this model to be effective, the outcome being predicted must be accurate and reliable. Gillingham (2016) utilised AI to forecast risks for preventative services. AI-driven models enable social workers to explore the nature and causes of problems and developing interventions that help young people to understand themselves and their environment. However, there are a number of ethical concerns related with this type of AI tool which will also be explored in the 'Ethical challenges of AI for social work' section.

1.3 Service provision

Chatbots and virtual assistants' may offer useful tools for provision of accessible mental health counselling and social support in particular low-risk contexts. It is reported that AI-powered tools can offer non-judgemental advice and support. This support could supplement human interactions and be accessed anytime, from anywhere (Cross et al., 2024; Nuwasiima et al., 2024; Coulthard et al., 2025). While generative AI Chatbots offer significant potential for accessing therapies and mental health care, those with limited access to technology and digital literacy may be excluded. Furthermore, this type of AI system and tool presents complex human rights, ethical, and moral challenges (Garkisch & Goldkind, 2024a; Mooghali et al., 2024; Pradeep Ghantasala et al., 2024; Reamer, 2023; Sharma & Shambharkar, 2024; Vo *et al*., 2023). For example, the protection of sensitive personal data and the right to privacy pose a significant challenge, as digital platforms are susceptible to data breaches and misuse. Additionally, AI

systems or tools may perpetuate and amplify existing biases present in the training data (Dubber *et al.*, 2020). In the 'Ethical challenges of AI for social work' section, these challenges will be explored. A lack of access for individuals with limited digital literacy or access to resources may potentially exacerbate existing inequalities.

1.4 Quality control and improvement

AI can be utilised to monitor the quality of social work interventions and services by ensuring that organisations are using best practices (Garkisch & Goldkind, 2024a; L. Li *et al.*, 2025) For example, by analysing customer interactions and feedback, AI can evaluate service quality and determine customer satisfaction. AI can analyse large volumes of data to assess the quality of services. It can also automate quality control processes and offer data-driven insights for social work interventions. Additionally, AI can monitor individuals' health and wellbeing through wearable devices or other technologies. This capability enables it to provide real-time feedback on, for example, their health condition, facilitating timely intervention. AI can optimise quality in social work by streamlining some administrative and routine tasks. AI can also be potentially used to develop evidence-based decision and improve the accuracy and speed of risk assessment and decision-making (Rodriguez *et al.*, 2019; Schwartz *et al.,* 2017).

1.5 Administrative tasks

Some social work organisations are currently piloting AI-powered tools for report writing, data analysis, and document summarising on a small scale. The use of AI Chatbots is currently showing potential by generating new text that mimics human conversation and producing care plans and writing meeting notes (University of Oxford, Institute of Ethics in AI, 2025). The literature claims that the purpose of these tools is to free up social workers to focus on direct engagement with the individuals they are serving (Schneider & Seelmeyer, 2019). It is however vital to remember that writing in social work is not a separate activity from the practice of social work (Rai *et al*., 2025), it is through writing that social workers convey nuanced information where each and every word matters.

Social workers who utilise AI tools, particularly generative AI, can perform their writing tasks more efficiently and enhance their grammar, vocabulary, and clarity. This could lead to more professional and effective written communication (Budiyono, 2025; Coman & Cardon, 2024; Van MerriÃ«nboer & Sweller, 2010; Ziar, 2025) and help social workers develop their confidence and lower their anxiety level (Coman & Cardon, 2024; Eragamreddy, 2024). That does not imply that social workers should not develop their writing skills. AI tools may assist their writing, but they still need to think critically and creatively to write effectively (Rai et al. 2025). Additionally, educational literature suggests that overreliance on AI could diminish cognitive effort, creativity, problem-solving skills, and independent writing skills (Eragamreddy, 2024; Niloy et al., 2024; Ziar, 2025). Furthermore, AI-generated writings and messages may not

convey the same sincerity as human-written ones (Coman & Cardon, 2024). Therefore, social workers must integrate AI tools for writing critically to maximise the benefits while preserving core writing abilities.

2.0 Efficiency, accessibility and reduction of costs

AI systems and tools are widely promoted to increase efficiency, reduce costs and increase accessibility to services (Table 2). For example, Koutsounia (2024a) reported that 28 councils in England are using or testing Magic Notes for cases from visits. Pilot findings by Local authorities and BEAM suggest that this AI tool reduced the average time to conduct an assessment under the Care Act (2014) conversation from 90 to 30 minutes and the time spent on follow-up case notes from four to one-and-a-half hours. This tool is reported to reduce administrative tasks by an average of 12 hours per week. Based on this figure, BEAM estimated that UK social workers collectively save some 7,500 years of time annually, which means saving about £2bn of public spending. One practitioner who used this tool in the focus group session commented:

> …It allowed social workers to engage more with people… it saved time and no issues with bias were identified (E_SWE_3)

Table 2: Advantages of AI

Advantages of AI	References
Increase access to services Client identification Intervention classification Support decision-making Support to carry out risk assessment Increase workflow efficiency Increase social workers' efficiency Reduce workload Enhance collaboration Provide personalised and tailored support Service monitoring Improve quality	(Bako, Taylor, *et al.*, 2021; Bako, Walter-McCabe, et al., 2021; Coulthard *et al.*, 2025; Cross *et al.*, 2024; Devlieghere *et al.*, 2022; Garkisch & Goldkind, 2024a; Gillingham, 2016, 2017, 2019; Guo & Ma, 2022; Jørgensen & Nissen, 2022; Keen *et al.*, 2021; Meilvang, 2023; Meilvang & Dahler, 2024; Nuwasiima *et al.*, 2024; Robila & Robila, 2020; Rodriguez *et al.*, 2019; Schneider & Seelmeyer, 2019; Schwartz *et al.*, 2017; Victor *et al.*, 2021; Yin, 2021)

Some local authorities are using Copilot to ease the burden of administrative tasks, similar to how Magic Notes operates (Koutsounia, 2024a, 2024b). However, unlike Magic Notes, Copilot, ChatGPT, Claude, Gemini, and DALL-E are publicly available tools that are not specifically designed for a social work context.

This rapid literature review found that AI-powered systems have the potential to enhance healthcare access and delivery by improving diagnostic accuracy and enabling personalised, preventive care (Palaniappan et al., 2024). In light of this finding, and the capability of current AI technologies (such as predictive

analytics and machine learning) AI may be able to perform specialist tasks such as risk assessments more cost-effectively and timely in the areas of child and adult protection, mental health and substance misuse interventions in future (Nayak & Tiyadi, 2024).

Alongside efficiency, AI has the potential to provide personalised and tailored services to people. Analysing large volumes of data is suggested to improve the effectiveness of social work interventions (Cross *et al.*, 2024; Nuwasiima *et al.*, 2024; Robila & Robila, 2020). By doing to so it is perceived that organisations will be able to allocate resources where required, intervening early, preventing escalation of issues and developing cost effective services (Schofield, 2017; Victor *et al.*, 2021; Zetino & Mendoza, 2019). Furthermore, reducing workload and automating routine tasks may allow organisations to become more efficient deploying scarce resources in a targeted and demand-driven manner (Rice et al., 2018).

Although AI may support the delivery of efficient and tailored services, it presents legal, ethical and moral challenges which need to be addressed to maximise the potential for social work. Concerns regarding algorithmic bias, privacy issues, accuracy, transparency, accountability, explainability, cost and sustainability emerged as themes in the literature and will be explored later in the report. It is thus fundamental that AI systems and tools for social work must be developed and implemented in a manner that upholds social work values, ethics and human rights (Reamer, 2023). Any AI technology used in social work should ensure the promotion of human dignity, autonomy and justice. AI-

technologies hold transformative potential for social work practice and education however it is essential to balance its benefits with ethical considerations (Rai et al., 2025).

Artificial Intelligence's rapid growth raises concerns about its ethical and legal implications. Regulators face challenges in developing frameworks that keep up with AI innovation; these issues are examined further in the next section.

3.0 Ethical challenges of AI for social work

The literature review highlighted some benefits of using AI in social work. However, it also revealed significant challenges related to ethics, bias, privacy, and transparency (Table 3). Some of these challenges are inherent in the limitations of AI technology e.g. generating bias outputs. Subthemes generated by this review include:

3.1. Data use, security and privacy

Data security and privacy are one of the main concerns highlighted across articles about AI and health, social care and social work (Garkisch & Goldkind, 2024a; Mooghali *et al*., 2024; Pradeep Ghantasala *et al*., 2024; Reamer, 2023; Sharma & Shambharkar, 2024; Vo *et al*., 2023). Use of sensitive data, potential misuse of data and breaches of confidentiality were highlighted risks of AI in the social work literature.

Both data quality and quantity are vital for a responsible AI system. Data quality and quantity ensure the accuracy of AI systems and tools. Effective generalisation of data depends on the amount of data inputted in AI systems, and poor quality, biased or noisy data can lead to an inaccurate outcome. For example, if the data reflects biases, e.g. historical biases against certain racial, socioeconomic or cultural groups, the AI systems would perpetuate and even, in some instances, amplify these biases. This can lead to an incorrect social work assessment as well as discriminatory outcomes and disproportionately harm vulnerable populations (Reamer, 2023). Crucially however, AI systems and tools would not generate a one hundred per cent accurate result under any conditions. Therefore, the Department for Science, Innovation, and Technology (2025) advises clearly that defining the objective measures that will be used to evaluate AI outputs and identify influencing factors is essential.

It can be argued that, since some AI tools are now publicly available, their use in social work seems inevitable. However, social workers should exercise caution when using publicly available AI tools. The risk of using publicly available AI tools is that they are not designed for social care and social work. This makes it difficult to understand what's happening with the data users input to gain outputs from those tools. Concerns related to data privacy and confidentiality, as well as informed consent, are challenging when information is not readily available on public platforms. It is, therefore, of particular importance to develop and procure AI systems and tools that are fit for purpose in social work, enabling the handling of sensitive information where all parties are fully aware of how their data is being used.

3.2 Bias, fairness and discrimination

AI systems and tools might pick up biases from the data they are trained on. Algorithmic bias, human decision bias, and data biases can all influence the output that AI systems and tools generate. As a result, the outputs produced by an AI system or tool may fail to reflect the diversity of populations accurately and can unintentionally perpetuate existing social inequalities. For example, this means that it is possible for the AI system to produce unfair assessments in social work (Nuwasiima et al., 2024). Although AI can process and analyse vast amounts of data to identify risks and make decisions, it does not truly understand the context in which social work takes place. It could be argued that AI is adept at recognising patterns, correlations, and nuances in data that social workers might miss. Still, it does not possess the skills for critical reasoning, common sense, and interpreting subtle cues that are vital for an entirely contextual understanding to carry out a social work assessment (Koutsounia, 2024). Findings like this also echoed the concerns expressed by three individuals with lived experiences during the focus group of this review. One participant shared her worries:

> An AI system might inadvertently discriminate against me because it may not fully understand my unique needs, which are deeply personal and have never been expressed by anyone before." (S_SWE_P2).

Table 3: Challenges of AI

Challenges	References
Bias Data privacy Algorithmic bias Increase disparities People's rights and safety Data storage and security Inaccurate outputs Reduce access Unable to deal with complications Unable to consider contextual information Technical uncertainties Technical barriers Unregulated standards Professional autonomy Over reliance on AI Not suitable for everyone Care experience	(Boetto, 2025; Fenech & Buston, 2020; Garkisch & Goldkind, 2024a; F. Li *et al.*, 2022; L. T. Li *et al.*, 2023; Luxton, 2014; Mooghali *et al.*, 2024; Nuwasiima et al., 2024; Pradeep Ghantasala *et al.*, 2024; Reamer, 2023; Reddy *et al.*, 2020; Reddy, 2023; Sharma & Shambharkar, 2024; Siala & Wang, 2022; Vo *et al.*, 2023; Yeng *et al.*, 2019)

3.3 Transparency, trust and explainability

The term 'Black box' refers to the opacity of AI systems in that their internal workings are not explicit, can be challenging, and, in some instances, impossible to understand, even by their creators particularly in the case of deep learning techniques. Although the input and output of an AI system are clear and visible, the reasoning or the process by which the system arrives at the output remains hidden and difficult to codify. When it comes to a decision or prediction made by an AI system, it is often difficult to understand the reasoning behind it. Due to the black box phenomenon, the transparency of AI systems was highlighted as an ethical concern in the literature (Akinci D'Antonoli, 2020; Séroussi *et al.*, 2020). Trust and data processing are linked to the perception of transparency in an AI system. It is, therefore, important for an AI system to explain its decision-making process to increase trust and transparency. Walsh *et al.*, (2020) and Vellido (2019) argue that, the better the explanation, the higher the level of trust in an AI system in the healthcare profession. A system's credibility depends on practitioners' trust in it, and the only way to achieve this is to provide clear explanations of how decisions and predictions are made (Luxton, 2014). Additionally, practitioners must provide the reasoning behind their decisions, and if they are utilising the AI system, they must be confident in the decisions and predictions it is making. The only way to achieve this is to understand how AI systems produce outputs, where explanations of the process by which input data is processed to generate outputs are explicit (Reddy, 2023; Walsh *et al.*, 2020). Furthermore, data usage, confidentiality, and privacy could influence trust in an AI system (Fenech & Buston, 2020; Reddy, 2023; Yeng *et al.*,

2019). Social workers need to understand the way AI systems and tools reach their conclusions to use them responsibly in a way where they can defend their professional recommendations. Without this it is difficult to trust on the system (Garkisch & Goldkind, 2024a; Mooghali *et al.*, 2024; Reamer, 2023; Vo *et al.*, 2023). A project manager who attended the practitioners' focus group for this review commented about AI systems like Magic Notes,

> It will not take fully automated actions. Practitioners check and scrutinise everything produced by the Magic Notes. They must always make the final decisions." (E_SWE_1)

AI, particularly generative AI, has just started to penetrate the social work profession and social care, but its overall impact is still not empirically evidenced in the literature. Large language models and other probabilistic generative AI systems and tools could produce 'hallucinations'. That means AI systems and tools create content that appears plausible but is factually incorrect or inaccurate. If social workers don't critically verify the AI's outputs, this can lead to misinformed decisions and potentially harmful interventions.

There is a risk that some generative AI may retain and potentially regenerate information that others could access, posing a significant risk to people's privacy. Entering personal data into language models may violate UK data protection principles. Hence, Social workers should refrain from entering personal and confidential data into the language model unless the provider guarantees compliance with data protection laws and guidelines, such as

General Data Protection Regulation (GDPR) and the Data Protection Act 2018. Additionally, the provider should align with social work values and uphold moral and ethical principles.

AI systems and tools must undergo rigorous external evaluation before being used in health, social care, and social work contexts. Conducting case-controlled studies or diagnostic cohort validations can help to ensure that AI technologies function consistently across different populations and circumstances. Unfortunately, external validation is frequently overlooked, which might result in a lack of trust in AI systems.

3.4 Accountability and Responsibility

When an AI system provides a recommendation or contributes to a choice that has an adverse effect, it is unclear who is ultimately responsible: the AI developer, the agency that deployed it, or the social worker who used the technology. This blurs the lines between professional responsibilities and accountability (Reamer, 2023; Vo *et al.*, 2023). The complexity and opacity of AI systems and tools make it challenging to trace and assign responsibility and accountability for the outputs generated by these systems and tools. There is a growing consensus that clear legal structures and ethical guidelines are essential for defining and enforcing accountability for AI outcomes in health, social care, and social work (Busuioc, 2021; Trocin *et al.*, 2023). These issues are fundamental to the professional social work role, authority and tasks.

3.5 Integration and implementation of AI

Although AI has started to penetrate the social work profession, it is still in its early stages. To utilise AI to its full potential, it is vital that it is integrated within existing social work processes to be implemented successfully. However, integrating AI systems within existing systems could pose serious challenges:

Table 4: Challenges of integration and implementation of AI

Challenges of integration and implementation	References
Ambiguous understanding of AI Difficulties to integrate within the existing systems and workflows Inconsistent performance of AI systems or tools Expectation Lack of familiarity with AI Lack of resources Lack of trust Lack of transparency Lack of AI literacy Lack of digital literacy Social workers' disapproval of AI Uncertainties surrounding regulatory and legal issues Prone to cyber threats Constant monitoring and reviewing	(H. Khan & Bokhari, 2024; Koshechkin & Khokholov, 2024; Morley & Floridi, 2020; Petersson *et al.*, 2022)

4.1 Internal factors

Literature on implementing AI in health care suggests that it would be challenging to integrate AI without transforming professional roles and healthcare practices. Healthcare leaders are concerned about integrating AI systems with current workflows and resistance from healthcare professionals

who would potentially be hesitant to adopt new technologies due to ethical and legal concerns (Petersson *et al.*, 2022) as well as their knowledge about AI systems. Over 60% of healthcare professionals report hesitancy in adopting AI due to transparency issues and fears about data security (H. Khan & Bokhari, 2024). Concerns about patient safety, professional autonomy, and the potential for AI to produce unfair or inscrutable outcomes make professionals hesitant to adopt these technologies (H. Khan & Bokhari, 2024; Koshechkin & Khokholov, 2024; Morley & Floridi, 2020).

Health, social care, and social work organisations need a clear plan to use AI systems for routine services that takes these complexities into account. This will help ensure that AI tools support existing practices and cause little disruption. Furthermore, organisations should prioritise building capacity to reduce resistance and provide practitioners with adequate, relevant resources and training.

The findings of this review indicate that successful AI implementation will require collaboration across various agencies, such as health, local authorities, voluntary and private organisations, with investment of their time and resources. Creating interoperability standards is critical for seamlessly integrating AI technologies with existing health, social care, and social work systems. Health, social care, and social work organisations can improve the usability of AI technologies and remove barriers to adoption by developing frameworks that promote data exchange and communication between multiple systems.

4.2 External factors

Peterson *et al*. (2022) found in their Swedish qualitative study that healthcare leaders' regulatory and ethical frameworks can be slow to adapt, which can hinder the integration and implementation of AI systems. Healthcare leaders cannot influence this area because it requires legislative and policy changes at a national level. Similarly, there is no 'AI law' in the UK, and the rapid innovation in AI technology often outstrips the development of regulatory frameworks, policies, and practice guidance. This delay creates a situation where health and social care organisations, professionals, and regulatory bodies lack clear guidelines on what is acceptable. This uncertainty poses risks for practitioners, organisations, regulators and the people using social work services. Recognising these challenges, a variety of initiatives have been introduced to foster a sense of certainty for organisations and practitioners. These efforts will be explored in the following discussion.

5.0 Governance and regulation of AI

Calls for effective governance, regulation and guidance on the use of AI were identified across the spectrum of literature reviewed. This includes findings that AI governance frameworks are required to integrate AI systems and tools safely and effectively in practice (box 1). A recent survey by Stogiannos *et al*. (2024) explores how to manage and encourage the use of AI in medical imaging and radiotherapy (MIRT) in the UK. The survey highlights knowledge gaps regarding

AI governance and frameworks within the field of MIRT. This study also identifies professionals' lack of awareness and understanding regarding existing frameworks. They propose that existing governance frameworks, such as the National Institute for Health and Care Excellence (2023) and NHS England (2020), should be tailored to fit the specific needs and practices of MIRT departments. It is important to contextualise these frameworks in a particular discipline and AI technology so that they are relevant and practical in local contexts.

Alongside these frameworks, Stogiannos *et al.* (2024) emphasise the importance of the British Standards Institute's (BSI) guidance regarding the validation and monitoring of AI tools used in healthcare. They specifically recommend the application of BS 30440 (British Standards Institute, 2023; Sujan *et al*., 2023) to ensure compliance and effectiveness in these technologies. AI systems must not be integrated into health, social care and social work without a validation process. It should be part of the inclusive AI governance frameworks (Department for Science, Innovation and Technology, 2025), which ensure that AI technologies are developed and deployed in a manner that is ethical, safe and beneficial for everyone. This can be achieved through engaging diverse stakeholders, focusing on moral principles, transparency, accountability, bias mitigation and maintaining meaningful human oversight throughout the AI system’s lifecycle. Both users, who are people using services and practitioners, want trustworthy, robust, and explainable AI systems which are necessary to gain the confidence of everybody. They call for training programs for practitioners about AI governance to improve acceptability and usability.

Box 1 Measures for safety and efficacy of AI tools in Australia, China, the UK and the USA.

To promote safety and efficacy in AI tools, several measures have been developed in Australia, China, the UK, and the USA, primarily focusing on health and social care. Some examples are included below:

UK: In the United Kingdom, NICE and NHS England collaboratively developed the "Evidence Standards Framework for Digital Health Technologies" in 2019, which sets out detailed regulatory criteria covering standalone digital tools and those combined with other products. In parallel, the UK's Regulatory Horizons Council produced a document titled "The Regulation of AI as a Medical Device" in November 2022. This document underscores the entire product lifecycle and is focused on improving patient and public engagement while streamlining communication between regulators, developers, and users. Additionally, the Medicines and Healthcare Products Regulatory Agency (MHRA) spearheaded a reform programme known as the "Software and AI as a Medical Device Change Programme" in September 2021, ensuring that the emerging challenges of cybersecurity, data privacy, evolving AI algorithms, and algorithm bias are effectively addressed by encompassing both pre-market and post-market considerations.

Initially, the European Union developed non-binding measures such as the "Ethics Guidelines for Trustworthy AI" and the "Policy and Investment Recommendations". In 2021, it shifted focus and launched the "European Medical Device Regulation" in May 2021, which classifies risks for Software as a Medical Device (SaMD) based on diagnostic and therapeutic intentions. They

proposed the AI Act in April 2021 as a harmonised, risk-based legal framework. This includes detailed requirements for risk management, data governance, and human oversight and imposes specific obligations on providers, especially for high-risk AI systems in healthcare.

Australia and New Zealand: The Royal Australian and New Zealand College of Radiologists outlined the "Ethical Principles for AI in Medicine" in April 2019, emphasising the importance of upskilling and proper standardisation among medical practitioners. The Therapeutic Goods Administration (TGA), which oversees the regulation of SaMDs, modified its guidelines in August 2021 with the "Regulatory changes for software-based medical devices." This introduced a risk-based classification approach that targets AI applications with high implications for patient safety while exempting several healthcare-related consumer products and technologies.

China: China's National Medical Products Administration (NMPA) plays a key role in guiding and standardising the use of AI-based software in healthcare. They introduced the "Technical Guideline on AI-aided Software," published in June 2019, which explains important features of deep learning technology. This guideline helps ensure that the algorithms used in healthcare maintain high standards for quality, such as controlling the data quality, implementing valid algorithms, and assessing clinical risks in simple terms that can be understood by experts and newcomers alike. Later, on 8 July 2021, they published "Guidelines for the Classification and Definition of Artificial Intelligence-Based Software as a Medical Device". This document outlines how to classify and define AI-based tools used in healthcare, clarifying what makes an AI tool

suitable for helping doctors with decision-making for treatments or diagnoses. The Centre for Medical Device Evaluation under NMPA published the "Guidelines for Registration and Review of Artificial Intelligence-Based Medical Devices." Based on these guidelines, companies must follow strict standards when they register new AI tools so that these tools are safe to use. It also highlights quality management practices and cybersecurity measures that protect patient information throughout the device's entire lifecycle.

USA: Although the Food and Drug Administration (FDA) does not have an AI-specific pathway to evaluate AI-powered tools and systems in the United States, they utilise existing medical device frameworks. This approach is exemplified in the FDA's "Proposed Regulatory Framework for Modifications to AI/ML-based SaMD", issued in April 2019. This guidance mandates developers to monitor real-world performance and update the FDA on any performance or input changes. To enhance transparency from January 2021, an "AI/ML-based SaMD Action Plan" is introduced, which focuses on a total product life cycle (TPLC) approach. This plan notably lays out actions such as implementing a "Predetermined Change Control Plan," adherence to Good Machine Learning Practices (GMLPs), ensuring patient centricity, mitigating ML algorithm biases, and issuing guidance for algorithm improvement.

Ethical and legal risks associated with the development of AI pose serious challenges for professional and regulatory bodies. The fast pace of AI innovation, development and continuous learning from real-world data causes further challenges for public bodies to develop specific frameworks to capture

all aspects of ethical concerns and risks associated with it (Gilbert et al., 2024; Palaniappan et al., 2024; Schmidt et al., 2024). Nevertheless, recently, the British Association for Social Workers (BASW, 2025), an independent professional statement outlining recommendations for social workers regarding utilising generative AI. The National Association for Social Workers (NASW, 2025) in the USA suggested that social workers need to stay within their code of ethics and be 'excited, curious and sceptical' in equal measure about the use of generative AI. It is important to recognise that AI is currently evolving at a rapid pace, making it challenging to establish specific guidance on AI tools or applications because the technology frequently advances and new tools continuously emerge. This results in a perpetual game of catch-up where guidance lags behind real-world practice.

This literature review highlights the need for a strong governance model that promotes responsible use of AI. This model should be flexible enough to keep up with the rapid changes in AI technology. It must ensure accountability, explainability, transparency, privacy, confidentiality, fairness, impartiality, safety, and security. It is also recommended in the literature that regulatory bodies should update their frameworks regularly and clearly communicate with practitioners (Gilbert *et al*., 2024; Goktas & Grzybowski, 2025; F. Khan *et al*., 2024; Koshechkin & Khokholov, 2024; Palaniappan *et al*., 2024). Some authors suggest interdisciplinary collaboration and global regulatory convergence to ensure consistent standards (Khan *et al.,* 2024; Goktas & Grzybowski, 2025; Palaniappan *et al*., 2024). Principles of co-production should be observed to produce frameworks and guidelines. A plan to upskill social workers as part of their

Continuing Professional Development (CPD) in the use of digital technologies, including AI, need to be developed as a matter of urgency, acknowledging that digital capability is already embedded in education and professional standards for social work across the UK.

Adopted AI tools and systems must not harm or disadvantage people who receive services, including the most vulnerable, those with reduced decision-making capabilities, and people from minoritised backgrounds. That means AI tools and systems must be designed to promote social justice and protect the rights of marginalised populations. Different AI systems and tools have various configurations. They are based on other technologies, resulting in different challenges, as suggested by the review, which must be assessed on a case-by-case basis before purchasing, integrating and implementing. Before adopting AI systems, regular monitoring and evaluation are essential to ensure their effectiveness for users and social workers. Given the sensitive nature of the data involved, service providers must enforce strict data protection measures like encryption and access limitations. Additionally, since AI is not recognised as a legal entity, the accountability and legal liability of AI systems are a matter of government concern as to their regulation.

6. AI in Social work training and education

Like social work practice, AI is already impacting social work education and training. Its integration into social work education is crucial to prepare future social workers in a technologically evolving landscape for their study and their

subsequent practice. This section includes both the opportunities and challenges of AI in social work training and education.

6.1 Personalised learning, access and support

AI has the ability to create a personalised learning path as well as allowing students to adapt content and assessment to individual needs, learning style and progress. Automated feedback to learners is possible by using AI technology (Dalziel *et al.*, 2024; Hodgson *et al.*, 2022; Nuwasiima *et al.*, 2024; Revesai *et al.*, 2024). Automated feedback on written assignments and adaptive learning management systems, both powered by AI, can assist with grading, providing feedback and enhancing accessibility for social work students. This can enhance teaching effectiveness and learners' outcomes, as well as having the potential to make social work education more responsive and scalable (Hodgson *et al.*, 2022).

Using AI with virtual reality simulation would allow learners to practice skills in safe and controlled environment (Revesai *et al.,* 2024; Dalziel *et al.*, 2024; Nuwasiima *et al.,* 2024). Also, augmented reality and virtual reality engage learners interactively, provide flexibility, accessibility and most of all enrich social work students' and practitioners' learning experiences (Haider *et al.*, 2024; Simpson *et al.*, 2024). This technology can also be beneficial in resource-limited settings (Dalziel *et al.*, 2024; Revesai *et al.*, 2024; Yousif *et al.*, 2024). Translation as well as intelligent search AI tools support social work learners to access up-to-date knowledge and resources and by doing so it can reduce educational

inequalities (Revesai *et al.,* 2024). However, over-reliance on this type of technology is problematic in a relationship-based profession such as social work because it restricts opportunities for practical, face-to-face interactions, which are sometimes crucial for safeguarding vulnerable people (Haider, 2023, 2025). It could also hinder the development of essential practical, interpersonal, and ethical skills among social work students.

Intelligent tutoring systems, virtual assistants and Chatbots can offer timely support including mental health or social support, increase social work students' engagement, reduce dropout or withdrawal from studies (Nuwasiima *et al*., 2024; Hodgson *et al*., 2022). AI-powered tools capable of handling large datasets, support learners to carry out literature reviews and help them to develop research questions. Social work educators and researchers also could benefit from using AI to collaborate with different disciplines and manage complex projects (Hodgson *et al*., 2022).

6.2 Administrative efficiency

Like social work practice, AI can streamline administrative tasks such as students' recruitment, enrolment, retention, alumni engagement and case management. Automation of routine tasks is another possibility that AI can offer, which frees up resources. This could enable educators to focus on their teaching and complex human interactions which consequently should improve students' learning experiences (Yousif *et al*., 2024; Hodgson *et al*., 2022).

6.3 Preparing for digital futures

Integration of AI in social work curricula enables students and educators to develop digital literacy agility which equips them for social work practice (Hodgson *et al*., 2022; Stone, 2023).

6.4 Assessment and curriculum redesign

AI-powered tools now challenge traditional assessment methods and influence educators to rethink the way they assess students' learning. This includes consideration of what knowledge and skills they need to assess e.g. critical thinking, ethical decision-making, and reflective practice (Hodgson *et al*., 2022, 2023; Stone, 2023). Additionally, generative AI can increase social work students' engagement, collaboration and accessibility, but it raises concerns about academic honesty and plagiarism which remains at the centre of current academic debate (Cotton *et al*., 2024). In a profession like social work, the implication of academic dishonesty is inextricably linked with suitability to practice in terms of upholding social work values.

6.5 Ethical and relational concerns

Similar to practice issues, literature on AI and social work education raises issues around privacy, accountability, transparency, data bias, algorithmic bias,

and the potential erosion of core social work values like empathy and human connection (Dalziel *et al.*, 2024; Hodgson *et al.*, 2022, 2023; Nuwasiima *et al.*, 2024; Revesai *et al.*, 2024; Stone, 2023).

6.6 Disruption of traditional roles and practices

AI-powered tools could change conventional academic tasks such as grading and tutoring; this could redefine educators' roles, and they need to adapt pedagogical approaches to leverage AI without losing core social work education values and ethics (Hodgson *et al.,* 2022).

6.7 Digital divide

Existing inequalities in relation to accessing technology and lack of digital literacy might increase due to the integration of AI (Revesai *et al.,* 2024).

7 Importance of humans in social work

There is a concern that AI applications, such as generative AI and large language models, will eventually take over in health, social care, and social work. It is a pressing concern. One of the senior social workers who engaged with this review stated

> Adult social work is certainly going to become a victim of AI. I cannot see how a slightly more sophisticated AI system than Magic Notes is unable to complete assessments for a package of care. It is a matter of time.' (E_SWE_4).

Headlines such as 'AI is replacing human tasks faster than you think' (Egan, 2024) are not helping this. The growth of AI capabilities has raised concerns in the health, social care, and social work sectors about this matter. Sezgin (2023), in his article, tried to analyse the question 'Can AI replace doctors?' and concludes that the primary function of artificial intelligence in health care is to complement, not replace, doctors and other health care professionals. In the context of health diagnosis and decision-making, he argues that adopting a human-in-the-loop approach, which combines the expertise of humans and AI, could improve the accuracy of decision-making. Human feedback is essential for developing and improving an AI system or tool because it not only enhances the adaptability of AI technologies but also minimises potential biases and errors. It is argued that human-AI collaboration drives enhanced patient outcomes, improves the quality of clinical decisions and streamlines healthcare workflows. This is also true for social care and social work, as the aim of AI technology is to make social care and social work systems and processes more efficient, effective, and equitable. That does not mean the job will be replaced. Probably, workforce adaptation and upskilling are required (Sezgin, 2023; Singh, 2025).

This literature review indicates that AI has substantial potential to significantly enhance efficiency, accuracy, and health and social care access. However,

current advancements suggest that AI's optimal role is as a collaborative partner (Sezgin, 2023). Many might view replacing social workers as fundamentally misaligned with the essence of this profession, particularly when enacted values, professional empathy, contextual understanding, and ethical responsibility rely on depth critical analysis. The development of AI has so far been unable to replace the fundamental human interactions essential to social work education and practice (Stone, 2023; Hodgson et al., 2021; Victor *et al.*, 2021). Thus, they remain central to human-centric care. AI will be a supportive and augmentative resource. It is within this area that further exploration is essential for the profession.

Discussion

This synthesis provides a summary of the current state of AI in social work practice and education, in particular, the opportunities and challenges posed by AI. By analysing 119 peer-reviewed articles and 44 pieces of grey literature from health, social care, and social work, this review provides evidence from the multifaceted landscape of AI, exploring its evolution, applications, ethical implications and future directions.

The review suggests that AI can improve the delivery of health, social care, and social work. Simultaneously, it may also lead to biases and inequities if not carefully managed, which is why fairness, transparency and accountability are critical aspects of the design, development, implementation and evaluation of AI tools and systems. This finding is consistent with other literature reviews in

health care (e.g. (F. Li *et al.*, 2022; Vo *et al.*, 2023) and social work (e.g. Garkisch & Goldkind, 2024). A responsible AI approach should strike a balance between technological innovation and ethical considerations. To achieve this, Boetto (2025) has developed a model for the social work profession called EPIC, which has four components to augment the advantages of AI while mitigating the risks it poses: ethics and justice (E), policy development and empowerment (P), intersectoral collaboration (I) and community engagement and empowerment (C).

The current use of AI in some local authorities in the UK indicates promising results, including the reduction of administrative related tasks and an improvement in the quality of reports that practitioners generate. That means AI may become an administrative assistant to support social workers rather than replace them and the decisions they need to make. It is noted within this literature review that social work writing is not merely administrative, but a core aspect of professional practice. Further independent research is required to establish how existing generative AI tools can enable social care staff and social workers to work efficiently by reducing the perennial social work concerns of removing administrative burdens from their workload while retaining professional social work judgements.

As local authorities in the UK increasingly engage with and adopt AI in social care and social work, technical hurdles such as data quality and model interpretability; integrating AI into legacy systems; addressing cybersecurity risks are identified as critical challenges in this review. AI applications in health, social care and social work need to be not only technically robust, but also

ethically sound, focusing on sustainability, human-centricity, inclusiveness, fairness, and transparency. Alongside this, the review suggests that AI and digital literacy are essential for health, social care, and social workers not only to utilise systems and tools powered by AI but also to address ethical concerns, reduce bias, and provide equitable and high-quality services to diverse and vulnerable populations. Digital and AI literacy would better equip social workers to recognise, address, and advocate against the biases that AI systems and tools could perpetuate and exacerbate in particular marginalised groups in our society. Investing in AI education and training will enable and empower practitioners to navigate through ethical issues responsibly and uphold professional standards if done in a way commensurate with social work standards. This review suggests that there is a need for tailored AI education and training programmes for health, social care, and social work practitioners, not only to address knowledge gaps and resistance to adoption but also to support the development of effective practices.

AI has great potential to transform social work. However, the literature in health, social care, and social work emphasises that ethical issues are major concerns. Key concerns include privacy, confidentiality, trust, transparency, algorithmic bias, discrimination, and accountability. These issues pose significant challenges to the responsible and equitable integration and implementation of AI systems and tools in social work. To combat these challenges, this review identified several strategies, including forming interdisciplinary teams, establishing a data governance panel, and involving all stakeholders from the design stage through to evaluation and review. Effective governance is a crucial component for the responsible deployment of AI. The EPIC framework

(Tjondronegoro,2024) which stands for education, partnership, infrastructure, and community, provides one possible model of AI governance; it focuses on different matters than what Boetto (2025) proposed in her EPIC framework illustrated previously. A framework like this could guide the implementation of AI in health and social care. Alongside this, international collaboration and adaptive regulatory frameworks are necessary to align AI development with societal values and human rights (Bikkasani, 2025).

This rapid review of literature utilised robust methods, including systematic searching, screening, and extraction to identify relevant articles from both academic and grey literature. People with lived experiences, employers, and practitioners also contributed to this literature review to provide a comprehensive understanding of AI use in social work, as well as the opportunities and challenges it presents. However, this review has some limitations. Firstly, although relevant peer-reviewed journal articles and grey literature are reviewed, the vast majority of articles found were commentaries, review articles, editorials, and perspective pieces, with a handful of original empirical research studies. Like any other review, the findings of this review may have been affected by publication and reporting biases. Another limitation of this review is the inclusion of literature only published in the English language due to available resources and time. This review might have missed articles published in non-English languages, e.g. Mandarin, Spanish and Hindi. Lastly, this review focused on social work, although literature from health and social care was reviewed to provide context and identify potential opportunities and challenges of AI in social work. The findings of this study may not be generalisable to other disciplines. More empirical studies are needed in AI and

health, social care and social work from diverse geographical regions as the current literature is predominantly Western-centric. The literature review is a snapshot in time in a rapidly evolving arena in which publications continue to emerge. It is essential to keep up to date on the evolution of literature relevant to social work to inform developments.

Research gaps

This rapid literature review aimed to provide evidence of AI's potential and constraints in social work practice and education. The findings highlight that while the development and application of AI in social work practice and education have thus far been very limited and dispersed the landscape is changing all the time. Some local authorities have started to introduce AI systems and tools on a small scale; evaluative studies are required to understand usage, acceptance and efficacy in social work, including unintended consequences. Research in relation to interoperability, integration and ethical implementation are also areas where further research is necessary with a specific focus on social work interventions, services and the types of data used therein.

Literature on practice highlights concerns over ethics, privacy and confidentiality without any solutions provided. The literature in relation to social work education also lacks critical engagement with these ethical issues posed by AI, with only a few studies focusing on the risks and challenges of AI in education (Haider, 2024; Hodgson *et al.*, 2022). Research would therefore be

beneficial about how AI can be most effectively integrated into the social work curriculum as well as within professional practice.

The scarcity of comprehensive, evidence-based research found within the review specific to social work makes it challenging to comprehend the full potential of AI including its influence, usefulness and suitability within social work. Research on both social work practice and education which reflect the unique interests of social work are urgently needed given the pace of change.

Overarching issues for progressing the AI agenda in social work

This literature review indicates that AI technologies have the potential to improve teaching, learning, and practice in social work. However, there are important concerns regarding how ethics, values, and effective governance can guide this advancement. All social work stakeholders have a key role in leadership of progressing the agenda on AI. Working together in the sector will be crucial for a cohesive approach that fits for the social work profession in England. It is important to remember the complexity of the landscape for policy, practice and regulation in England. There are multiple, often competing agendas, and rapidly shifting political shifts which influence professional practices across disciplines. Because AI evolves so quickly, any advice or suggestions may become obsolete in only a few weeks as new tools and models emerge. This necessitates a constant need for evaluation and adaptation, making it difficult to establish stable, long-term best practices. Furthermore, several stakeholders have competing priorities. Differing

perspectives and time constraints among stakeholders may result in a complicated, fragmented environment in which a united, sustained approach to AI in social work is challenging to attain.

Summary areas for potential action and development are highlighted here acknowledging that social work education and practice are inextricably linked:

Professional Standards

Social Work England Professional Standards set out what a social worker in England must know, understand and be able to do (Social Work England, 2019). These span a broad range that centres on ethical approaches and *establishing and maintaining the trust and confidence of people* (Standard 2) including *2.1 Be open, honest, reliable and fair.*

Standard 1 highlights the importance of the social work role in respecting people and their rights: *1.2 Respect and promote the human rights, views, wishes and feelings of the people I work with, balancing rights and risks and enabling access to advice, advocacy, support and services*. Issus of data security, confidentiality and informed consent are a clear connection between this standard and evidence from the literature review about potential risks. In relation to the potential biases of AI models *1.6 Promote social justice, helping to confront and resolve issues of inequality and inclusion* and the thread of this throughout other standards such as *2.2 Respect and maintain people's dignity and privacy* and *2.6 Treat information about people with sensitivity and handle*

confidential information in line with the law are hugely relevant and further examples of key connections.

Standard 3, *Be accountable for the quality of my practice and the decisions I make* brings the issues of professional assessment, accountability and decision-making to the fore, again related clearly to messages identified from the literature review on AI. Elements of Standard 3 relate to record keeping, notably 3.11 which includes *documenting how I arrive at my decisions.* The professional assessment process is clearly articulated. Continuing professional development is noted in Standard 4 however *3.10 Establish and maintain skills in information and communication technology and adapt my practice to new ways of working* demonstrates how issues raised by the literature review already fit within the standards set.

While these are just some examples, there are clear connections between the issues highlighted through the review of literature and all six Professional Standards which can help foreground the importance of the issues AI poses for individual social workers, their employers and the profession moving forward.

Social work education

Digital capability

The evidence reviewed suggests that expectations of the use of AI could be made explicit within social work education and training standards, professional standards and guidance aligned with the embedded development of digital literacy (Haider, 2024; Hodgson *et al.*, 2022). This aligns with existing

expectations that social work education providers scaffold digital capabilities in qualifying programmes to meet sector needs and employability criteria.

Area for action and development 1:

Social work education providers consider how to embed AI explicitly in digital skills and developing capabilities within programmes.

Approval and monitoring of programmes

The findings of the review suggest that Social Work England can explore how developments in and responses to AI are being integrated into programmes within their approval and inspection of education and training. Evidence of creative approaches can be gathered through the approval and scrutiny role to support shared learning across the education sector.

Area for action and development 2:

Social Work England can support programme providers to share evidence of how AI is integrated in programme delivery and support shared learning along with any barriers to doing so.

Regulatory development

The evidence reviewed suggests that Social Work England could explore the ways that AI is integrated in their own internal digital strategies as an evolving aspect of their response to technological developments.

Social Work England is likely to continue collaborative work with other professional regulators to improve practice, education, and ongoing professional learning. This collaboration will also ensure that the requirements for social workers in England are aligned with those of their colleagues across nations.

Area for action and development 3:

The evidence reviewed suggests that Social Work England continue in their leadership as a key collaborator with other regulators in sector to support cohesive approach to progressing agenda on social work education and AI.

Social work practice

Promotion of ethical practice

Due to the uncertainty and unpredictability of AI innovation, technology and its impact, this review suggests reimagining and revising social work ethical practice in the context of the evolving landscape. While social work values and ethical principles are enduring the changing context means that issues such as confidentiality, negotiating consent, data storage and security need to be managed in new ways (Garkisch & Goldkind, 2024b; Reamer, 2023). Professional Standards should be updated to recognise the increasing role of digital technologies, including AI, in social work practice.

Area for action and development 4:

Professional standards (Social Work England), and any employer guidance should support social workers to practice commensurate with the ethos of the profession aligned with safe, ethical and legally compliant data management in the context of AI.

Area for action and development 5:

Information needs to be clear for social work students and social workers about academic conduct and internal Fitness to Practice processes relating to unethical or improper use of AI (Haider, 2024; Hodgson *et al*., 2022). This review suggests that employers and social work programme providers have a vital role in reinforcing these expectations. They should actively ensure that standards

regarding AI use align with social work values, ethics, and emerging guidance. Social work employers and educators can also proactively foster a culture of responsible AI innovation and implementation, where the use of AI enhances social work learning and practice without compromising ethical considerations, biases, discrimination, and the risks involved (Boetto, 2025; Garkisch & Goldkind, 2024b; Hodgson *et al*., 2023).

Governance of AI systems

The evidence reviewed suggests that key stakeholders' involvement in design, implementation and evaluation of AI systems and tools are vital to foster trust and ensure not only their acceptability but also transparency and accountability. It is thus critical for policy makers, decision makers and developers to meaningfully involve key stakeholders to promote AI systems that are designed to support regular updates and maintenance (Vo *et al*., 2023).

Area for action and development 6:

Involvement of social care and social work organisations with key stakeholders to define performance measures that are clear and agreed for AI systems and tools is encouraged. This can aid in comparing AI systems and ensure they fulfil required quality standards that meet social work service needs.

The design and development of an AI tool must be person-centred, ethically and morally sound that is established on ethics-based governing principles, address biases, privacy, confidentiality, transparency, explainability, data safety and security of the systems and tools and the well-being and welfare of people

using it and social workers must be at its core (Haider, 2025). Clear criteria for data sharing and consent are necessary to comply with privacy laws and ethical standards.

Area for action and development 7:

The evidence reviewed suggests that social care and social work organisations adopt AI tools only when they are fully assessed to be safe, ethical, equitable, cost-efficient, improve the quality of social care and social work services, and, most of all, enable social workers to deliver the best possible care without undermining and compromising their social work values. Social workers must have the right to challenge, and should be actively engaged in critically analysing, decisions made by AI.

A shared understanding of the development, integration, implementation, and utilisation of AI should guide actions related to effective training and governance of AI systems and models used in social work practice

Area for action and development 8:

There are multiple people and organisations including social work regulators, educators, employers, registrants and people with lived experiences of social work services who could collaborate to maximise effective responses to the challenges and opportunities of AI for social work. Developing a cohesive understanding and response to AI which meets the needs and interests of the profession is fundamental to all these partners (Garkisch & Goldkind, 2024b; Hodgson *et al*., 2022, 2023).

People at the heart of social work relationships and interventions

Individuals using services and their caregivers should have the right to decide if an AI tool is used in their assessment and service delivery. This review suggests that social workers must be transparent with the people they serve about the use of AI and be accountable for its impact on users' experiences. Informed consent needs to be in place for them, and they should have an option to opt out of AI involvement. Also, informed consent is required for their data to be used to develop and improve AI systems. Artificial intelligence tools should not replace, but rather supplement, relationship-based social work, professional judgement and decision-making (Sezgin, 2023; Singh, 2025; Stone, 2023; Victor *et al*., 2021).

Area for action and development 9:

A focus on human-centric AI designs that prioritise the wellbeing and welfare of people who require and utilise services in line with social work values of human rights, equity and justice should be at the heart of developments in the sector. Clear information and support for people who use social work services to understand the implications of AI for their personal data is essential.

Critical thinking, professional judgement and decision-making

Social workers need to explain the way AI-driven decisions are made to the people they serve. Also, they need to understand the reason a specific decision was proposed or made. Social care and social work service provider might wish to mandate that AI systems provide clear explanations for their provider might social workers to understand and critically evaluate the results. This transparency is essential for maintaining the integrity of social work practices.

The evidence reviewed suggests that the prevalence of AI could undoubtedly replace some of the knowledge-based skills that social workers currently have. Social workers and social work students should continue to be trained to maintain those skills and knowledge so that they become flexible, adaptable, and expert. If AI systems fail, they must be able to maintain provision of quality care. Furthermore, social workers should be trained to use AI tools responsibly, ensuring that they complement rather than replace human interaction. Alongside this they must be trained to critically reflect on the use of AI in their practice. This includes recognising the limitations of AI and maintaining a focus on ethical decision-making.

Area for action and development 10

Social Work England, programme providers, employers, practitioners and students ensure that education and practice is driven by an ethos which recognises the importance of in-depth critical thinking in the process of social work assessment, professional judgement and decision-making (Garkisch &

Goldkind, 2024b; Hodgson *et al*., 2022, 2023). Understanding that social work professional practice is enacted through written products (e.g., records, emails, reports) needs to be remembered in terms of any AI use. Writing is not a separate element of the assessment, professional judgement and decision-making process.

Continuing professional learning

Continuing professional development opportunities for social workers to keep up with AI breakthroughs and their consequences for practice should be available and accessible. The evidence reviewed suggests that policymakers, service commissioners, and providers should address disparities in access to AI technologies, ensuring that all users and practitioners have equitable opportunities to benefit from AI-driven innovations (F. Li *et al*., 2022).

Area for action and development 11:

Access to appropriate, relevant continuing professional learning content which equips social workers and their employers to meet the needs of the changing context of practice with AI is essential. Learning opportunities should reflect the issues highlighted in this report relating to ethics, governance and the importance of humans for social work in the changing landscape.

Conclusion

This report summarises the findings from a rapid assessment of the literature, offering an overview of the current state of artificial intelligence (AI) in social work practice and education. It includes suggested areas for collaborative action and development in the sector in which Social Work England have a key interest. This review follows the principles of REAL systematic reviews (Crawford et al., 2015). The evidence outlined in this review suggests that AI offers both transformative opportunities and formidable challenges for social work practice and education. Standing on the brink of this technological revolution, it is clear that artificial intelligence is not only a suite of tools but also a force capable of drastically changing the delivery of social work services and how social workers operate within them.

This rapid review highlights the emerging and limited knowledge base that currently exists specific to social work, this suggests both the potential opportunities, the risks and concerns of social workers, people who use services, educators and employers. Potential opportunities are highlighted, particularly in automating administrative tasks and streamlining record-keeping, which may free up social workers from administrative burdens and allows them to concentrate more on engaging with and building relationships with the people who need their services. In contrast there is a reminder that what is regarded as administration is core social work practice in which the role of human being is essential to the critical thinking processes that social work involves.

The efficiency and effectiveness of social work may be enhanced by leveraging AI. Although predictive analytics are not currently integrated into social work in the UK, they have the potential to identify needs and risks, enabling informed decision-making. This type of AI could allow social workers to intervene early and prevent crises. Also, interventions can become targeted, which could reduce costs. A further example is that AI-powered educational tools could offer personalised learning experiences to students and provide real-time feedback about their learning. By doing so, it would help prepare them to become an effective practitioner.

As Gough and Spencer (2019) have asserted, technologies are not neutral, independent, or non-invasive, a principle also applicable to AI systems and tools. This review highlights that data privacy, algorithmic bias, and the potential for AI to perpetuate or exacerbate existing inequalities are significant risks and ethical concerns associated with AI. The "black box" nature of some AI systems challenges transparency, trust and accountability. Additionally, an excessive reliance on AI may undermine the human-centred nature of social work, potentially diminishing the essential relational and empathic elements that are vital for effective practice. Moreover, the digital divide runs the risk of excluding underprivileged individuals without access to essential technology, thereby exacerbating disparities in service provision.

According to this review, artificial intelligence in social work will not replace social workers but rather help and empower them. There are clear connections between the Professional Standards for social workers and the implications of the literature review. The successful integration of AI hinges on a thoughtful,

ethical, and human-centred approach. This implies that social workers need to develop continuously in the area of critical, curious, and creative thinking skills. They should uphold social work values and ethics, with a focus on social justice and human dignity.

Glossary

Black box: It refers to AI systems whose internal workings, that is, the way they predict and make decisions or generate output, are challenging to understand, mysterious, and opaque. Although the input and output of an AI system or tool are explicit, the exact logic and reasoning behind the system's generation of the production are hidden. Mostly, deep learning models exhibit this lack of transparency.

BS30440: It is a validation framework. It guides suppliers the way AI systems need to be developed for healthcare. It also enables to assess AI systems for conformity and certification. Healthcare organisations can mandate BS 30440 certification as a requirement to procure AI systems. This certification ensures an AI system have met a known standard. It also provides assurance to healthcare providers, clinicians and patients that AI systems will integrate safely into the clinical practice and are clinically effective and ethical (British Standards Institute, 2023).

Deep learning: A subset of machine learning; it uses neural networks with many layers to process complex data.

Generative AI: Generative AI is a subset of deep learning that specialises in generating new, realistic content based on patterns learned from data.

Interoperability: It refers to the ability of different AI systems, models, frameworks, and tools to work together seamlessly. That means the systems can exchange data, share functionalities, and integrate outputs without the concerns related to the incompatibility of different systems.

Machine learning (ML): AI often uses machine learning to learn patterns from large datasets. It enables computer systems to learn from data without explicit programming. ML algorithms learn by analysing a large amount of data, identifying patterns, and making predictions or decisions. They improve their performance and accuracy over time as they are exposed to more data.

Rule-based or traditional AI: Early AI systems utilise fixed rules and logic to solve problems.

XAI: XAI or Explainable AI refers to a field or research and practice that aims to make AI systems and tools understandable and transparent to humans. That means it focuses on demystifying the 'black box' nature of AI models, especially those based on complex algorithms such as deep learning. When predictions and decisions made by AI systems and tools are understandable, and the reasoning behind those decisions is explained, users' trust increases, as well as the transparency of the systems and tools.

References

Akinci D'Antonoli, T. (2020). Ethical considerations for artificial intelligence: An overview of the current radiology landscape. *Diagnostic and Interventional Radiology*, *26*(5), 504–511. https://doi.org/10.5152/dir.2020.19279

Bako, A. T., Taylor, H. L., Wiley, K., Zheng, J., Walter-McCabe, H., Kasthurirathne, S. N., & Vest, J. R. (2021). Using natural language processing to classify social work interventions. *The American Journal of Managed Care*, *27*(1), e24–e31. https://doi.org/10.37765/ajmc.2021.88580

Bako, A. T., Walter-McCabe, H., Kasthurirathne, S. N., Halverson, P. K., & Vest, J. R. (2021). Reasons for Social Work Referrals in an Urban Safety-Net Population: A Natural Language Processing and Market Basket Analysis Approach. *Journal of Social Service Research*, *47*(3), 414–425. https://doi.org/10.1080/01488376.2020.1817834

Bikkasani, D. C. (2025). Navigating artificial general intelligence (AGI): Societal implications, ethical considerations, and governance strategies. *AI and Ethics*, *5*(3), 2021–2036. https://doi.org/10.1007/s43681-024-00642-z

Boetto, H. (2025). Artificial Intelligence in Social Work: An EPIC Model for Practice. *Australian Social Work*, 1–14. https://doi.org/10.1080/0312407X.2025.2488345

Booth, R. (2024, September 28). Social workers in England begin using AI system to assist their work. *The Guardian*. https://www.theguardian.com/society/2024/sep/28/social-workers-england-ai-system-magic-notes

British Standards Institute. (2023). *Validation framework for the use of AI*. Validation Framework for the Use of AI. https://knowledge.bsigroup.com/products/validation-framework-for-the-use-of-artificial-intelligence-ai-within-healthcare-specification

Budiyono, H. (2025). Exploring Long-Term Impact of AI Writing Tools on Independent Writing Skills: A Case Study of Indonesian Language Education Students. *International Journal of Information and Education Technology*, *15*(5), 1003–1013. https://doi.org/10.18178/ijiet.2025.15.5.2306

Busuioc, M. (2021). Accountable Artificial Intelligence: Holding Algorithms to Account. *Public Administration Review*, *81*(5), 825–836. https://doi.org/10.1111/puar.13293

Coman, A. W., & Cardon, P. (2024). Perceptions of Professionalism and Authenticity in AI-Assisted Writing. *Business and Professional Communication Quarterly*, 23294906241233224. https://doi.org/10.1177/23294906241233224

Cotton, D. R. E., Cotton, P. A., & Shipway, J. R. (2024). Chatting and cheating: Ensuring academic integrity in the era of ChatGPT. *Innovations in Education and Teaching International*, *61*(2), 228–239. https://doi.org/10.1080/14703297.2023.2190148

Coulthard, B., Taylor, B. J., & McGlade, A. (2025). Artificial intelligence and evidence for social work: Will a robot steal your job? *European Social Work Research*, 1–6. https://doi.org/10.1332/27551768Y2025D000000033

Cross, S., Bell, I., Nicholas, J., Valentine, L., Mangelsdorf, S., Baker, S., Titov, N., & Alvarez-Jimenez, M. (2024). Use of AI in Mental Health Care: Community and Mental Health Professionals Survey. *JMIR Mental Health*, *11*(1), e60589. https://doi.org/10.2196/60589

Dalziel, M., Schaffer, K., & Martin, N. (2024). Navigating AI in Social Work and Beyond: A Multidisciplinary Review. *ArXiv*, *abs/2411.07245*. https://doi.org/10.48550/arXiv.2411.07245

Devlieghere, J., Gillingham, P., & Roose, R. (2022). Dataism versus relationshipism: A social work perspective. *Nordic Social Work Research*, *12*(3), 328–338. https://doi.org/10.1080/2156857X.2022.2052942

Dey, N. C. (2023). 'Unleashing the Power of Artificial Intelligence in Social Work: A New Frontier of Innovation'. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.4549622

Dubber, M. D., Pasquale, F., & Das, S. (Eds). (2020). *The Oxford handbook of ethics of AI*. Oxford University Press.

Egan, M. (2024). *AI is replacing human tasks faster than you think | CNN Business*. https://edition.cnn.com/2024/06/20/business/ai-jobs-workers-replacing

Eragamreddy, Dr. N. (2024). The Impact of AI in Creating Writing Skills in English Language Learners. *International Journal of Social Science Humanity & Management Research*, *03*(12). https://doi.org/10.58806/ijsshmr.2024.v3i12n05

Fenech, M. E., & Buston, O. (2020). AI in Cardiac Imaging: A UK-Based Perspective on Addressing the Ethical, Social, and Political Challenges. *Frontiers in Cardiovascular Medicine*, *7*, 54. https://doi.org/10.3389/fcvm.2020.00054

Garkisch, M., & Goldkind, L. (2024a). Considering a Unified Model of Artificial Intelligence Enhanced Social Work: A Systematic Review. *Journal of Human Rights and Social Work*. https://doi.org/10.1007/s41134-024-00326-y

Garkisch, M., & Goldkind, L. (2024b). Considering a Unified Model of Artificial Intelligence Enhanced Social Work: A Systematic Review. *Journal of Human Rights and Social Work*. https://doi.org/10.1007/s41134-024-00326-y

Gilbert, A., Pizzolla, E., Palmieri, S., & Briganti, G. (2024). Artificial Intelligence in Healthcare and Regulation Challenges: A Mini Guide for (Mental) Health Professionals. *Psychiatria Danubina*, *36*(Suppl 2), 348–353.

Gillingham, P. (2013). The Development of Electronic Information Systems for the Future: Practitioners, 'Embodied Structures' and 'Technologies-in-Practice'. *British Journal of Social Work*, *43*(3), 430–445. https://doi.org/10.1093/bjsw/bcr202

Gillingham, P. (2016). Predictive Risk Modelling to Prevent Child Maltreatment and Other Adverse Outcomes for Service Users: Inside the 'Black Box' of Machine Learning. *British Journal of Social Work*, *46*(4), 1044–1058. https://doi.org/10.1093/bjsw/bcv031

Gillingham, P. (2017). Predictive Risk Modelling to Prevent Child Maltreatment: Insights and Implications from Aotearoa/New Zealand. *Journal of Public Child Welfare*, *11*(2), 150–165. https://doi.org/10.1080/15548732.2016.1255697

Gillingham, P. (2019). Can Predictive Algorithms Assist Decision-Making in Social Work with Children and Families? *Child Abuse Review*, *28*(2), 114–126. https://doi.org/10.1002/car.2547

Goktas, P., & Grzybowski, A. (2025). Shaping the Future of Healthcare: Ethical Clinical Challenges and Pathways to Trustworthy AI. *Journal of Clinical Medicine*, *14*(5), Article 5. https://doi.org/10.3390/jcm14051605

Goldkind, L. (2021). Social Work and Artificial Intelligence: Into the Matrix. *Social Work*, *66*(4), 372–374. https://doi.org/10.1093/sw/swab028

Guo, X., & Ma, Y. (2022). Social Work Management Intelligent System Based on Improved Genetic Algorithm. *Mobile Information Systems*, *2022*, 1–11. https://doi.org/10.1155/2022/8615251

Gwadz, M., & Ritchie, A. (2022). Technology Trends: Keep a Wary Eye on Artificial Intelligence. *Social Work Today*, *22*(1), 32.

Haider, S. (2023). Impact of ICTs on Social Workers: A Scoping Review. In *The Palgrave Handbook of Global Social Problems* (pp. 1–31). Springer International Publishing. https://doi.org/10.1007/978-3-030-68127-2_391-1

Haider, S. (2024). Exploring opportunities and challenges of artificial intelligence in social work education. In J. Przeperski & R. Baikady, *The Routledge International Handbook of Social Work Teaching* (1st edn, pp. 46–62). Routledge. https://doi.org/10.4324/9781003422402-5

Haider, S. (2025). Uncharted territories: Exploring virtual reality-artificial intelligence integration in social work education. In *Social Work in Unequal World*. Oxford University Press.

Haider, S., Flynn, A., & Simpson, J. E. (2024). Attitude and readiness of utilizing virtual reality simulations in interprofessional education to facilitate prompt and safe hospital discharges in England. *Social Work Education*, 1–17. https://doi.org/10.1080/02615479.2024.2336105

Hodgson, D., Goldingay, S., Boddy, J., Nipperess, S., & Watts, L. (2022). Problematising Artificial Intelligence in Social Work Education: Challenges, Issues and Possibilities. *The British Journal of Social Work*, *52*(4), 1878–1895. https://doi.org/10.1093/bjsw/bcab168

Hodgson, D., Watts, L., & Gair, S. (2023). Artificial Intelligence and Implications for the Australian Social Work Journal. *Australian Social Work*, *76*(4), 425–427. https://doi.org/10.1080/0312407X.2023.2247833

Jørgensen, A. M., & Nissen, M. A. (2022). Making sense of decision support systems: Rationales, translations and potentials for critical reflections on the reality of child protection. *Big Data & Society*, *9*(2), 20539517221125163. https://doi.org/10.1177/20539517221125163

Keen, J., Ruddle, R., Palczewski, J., Aivaliotis, G., Palczewska, A., Megone, C., & Macnish, K. (2021). Machine learning, materiality and governance: A health and social care case study. *Information Polity*, *26*(1), 57–69. https://doi.org/10.3233/IP-200264

Khan, F., Ullah Jan, S., & Zia-ul-haq, H. M. (2024). Artificial intelligence adoption, audit quality and integrated financial reporting in GCC markets. *Asian Review of Accounting*. https://doi.org/10.1108/ARA-03-2024-0085

Khan, H., & Bokhari, S. F. H. (2024). Integrating Artificial Intelligence (AI) Chatbots for Depression Management: A New Frontier in Primary Care. *Cureus*, *16*(8), e66857. https://doi.org/10.7759/cureus.66857

Koshechkin, K., & Khokholov, A. (2024). Ethical issues in implementing artificial intelligence in healthcare. *Медицинская Этика*, *2024(1)*. https://doi.org/10.24075/medet.2024.006

Koutsounia, A. (2024, October 4). AI could be time-saving for social workers but needs regulation, say sector bodies. *Community Care*.

https://www.communitycare.co.uk/2024/10/04/ai-could-be-time-saving-for-social-workers-but-needs-regulation-say-sector-bodies/

Li, F., Ruijs, N., & Lu, Y. (2022). Ethics & AI: A Systematic Review on Ethical Concerns and Related Strategies for Designing with AI in Healthcare. *AI*, *4*(1), 28–53. https://doi.org/10.3390/ai4010003

Li, L. T., Haley, L. C., Boyd, A. K., & Bernstam, E. V. (2023). Technical/Algorithm, Stakeholder, and Society (TASS) barriers to the application of artificial intelligence in medicine: A systematic review. *Journal of Biomedical Informatics*, *147*, 104531. https://doi.org/10.1016/j.jbi.2023.104531

Li, L., Wang, M., & Jian, M. (2025). Artificial Intelligence-Assisted Case Management in Social Work Services: A Systematic Review. *Research on Social Work Practice*, 10497315251329531. https://doi.org/10.1177/10497315251329531

Luxton, D. D. (2014). Artificial intelligence in psychological practice: Current and future applications and implications. *Professional Psychology: Research and Practice*, *45*(5), 332–339. https://doi.org/10.1037/a0034559

Meilvang, M. L. (2023). Working the Boundaries of Social Work: Artificial Intelligence and the Profession of Social Work. *Professions and Professionalism*, *13*(1), Article 1. https://doi.org/10.7577/pp.5108

Meilvang, M. L., & Dahler, A. M. (2024). Decision support and algorithmic support: The construction of algorithms and professional discretion in social work: Beslutningsstøtte og algoritmisk støtte: Konstruktionen af algoritmer og det professionelle skøn i socialt arbejde. *European Journal of Social Work*, *27*(1), 30–42. https://doi.org/10.1080/13691457.2022.2063806

Mooghali, M., Stroud, A. M., Yoo, D. W., Barry, B. A., Grimshaw, A. A., Ross, J. S., Zhu, X., & Miller, J. E. (2024). Trustworthy and ethical AI-enabled cardiovascular care: A rapid review. *BMC Medical Informatics and Decision Making*, *24*(1), 247. https://doi.org/10.1186/s12911-024-02653-6

Morley, J., & Floridi, L. (2020). An ethically mindful approach to AI for health care. *The Lancet*, *395*(10220), 254–255. https://doi.org/10.1016/S0140-6736(19)32975-7

NASW. (2025). *AI and Social Work*. AI and Social Work. https://www.socialworkers.org/About/Ethics/AI-and-Social-Work

National Institute for Health and Care Excellence. (2023). *Evidence standards framework for digital health technologies*. Evidence Standards Framework. https://www.nice.org.uk/corporate/ecd7/resources/evidence-standards-framework-for-digital-health-technologies-pdf-1124017457605

NHS England. (2020, September 8). *A buyer's guide to AI in health and care*. NHS Transformation Directorate. https://transform.england.nhs.uk/ai-lab/explore-all-resources/adopt-ai/a-buyers-guide-to-ai-in-health-and-care/

Niloy, A. C., Akter, S., Sultana, N., Sultana, J., & Rahman, S. I. U. (2024). Is Chatgpt a menace for creative writing ability? An experiment. *Journal of Computer Assisted Learning*, *40*(2), 919–930. https://doi.org/10.1111/jcal.12929

Nuwasiima, M., Patricia, M., Ahonon, & Kadiri, C. (2024). The Role of Artificial Intelligence (AI) and machine learning in social work practice. *World Journal of Advanced Research and Reviews*. https://doi.org/10.30574/wjarr.2024.24.1.2998

Palaniappan, K., Lin, E. Y. T., & Vogel, S. (2024). Global Regulatory Frameworks for the Use of Artificial Intelligence (AI) in the Healthcare Services Sector. *Healthcare*, *12*(5), Article 5. https://doi.org/10.3390/healthcare12050562

Petersson, L., Larsson, I., Nygren, J. M., Nilsen, P., Neher, M., Reed, J. E., Tyskbo, D., & Svedberg, P. (2022). Challenges to implementing artificial intelligence in healthcare: A qualitative interview study with healthcare leaders in Sweden. *BMC Health Services Research*, *22*(1), 850. https://doi.org/10.1186/s12913-022-08215-8

Pradeep Ghantasala, G. S., S, M., Ghosh, D., Ps, A., Masali, A. B., & Singh, S. K. (2024). Wireless Health Monitoring for Calculating Vitals Device by Using IoT. *2024 Second International Conference Computational and Characterization Techniques in Engineering & Sciences (IC3TES)*, 1–4. https://doi.org/10.1109/IC3TES62412.2024.10877456

Rai, L., Ferguson, G., & Giddings, L. (2025). Writing as Social Work: Thematic Review of the Literature. *The British Journal of Social Work*, *55*(1), 25–44. https://doi.org/10.1093/bjsw/bcae124

Reamer, F. G. (2023). Artificial Intelligence in Social Work: Emerging Ethical Issues. *International Journal of Social Work Values and Ethics*, *20*(2), 52–71. https://doi.org/10.55521/10-020-205

Reddy, S. (2023). Navigating the AI Revolution: The Case for Precise Regulation in Health Care. *Journal of Medical Internet Research*, *25*, e49989. https://doi.org/10.2196/49989

Reddy, S., Allan, S., Coghlan, S., & Cooper, P. (2020). A governance model for the application of AI in health care. *Journal of the American Medical Informatics Association*, *27*(3), 491–497. https://doi.org/10.1093/jamia/ocz192

Revesai, Z., Tungwa, B., Chisosa, T. A., & Meki, V. R. (2024). Digital Empowerment in Social Work: Leveraging AI to Enhance Educational Access in Developing Nations. *IJIE (Indonesian Journal of Informatics Education)*. https://doi.org/10.20961/ijie.v8i2.92951

Rice, E., Yoshioka-Maxwell, A., Petering, R., Onasch-Vera, L., Craddock, J., Tambe, M., Yadav, A., Wilder, B., Woo, D., Winetrobe, H., & Wilson, N. (2018). Piloting the Use of Artificial Intelligence to Enhance HIV Prevention Interventions for Youth Experiencing Homelessness. *Journal of the Society for Social Work and Research*, *9*(4), 551–573. https://doi.org/10.1086/701439

Robila, M., & Robila, S. A. (2020). Applications of Artificial Intelligence Methodologies to Behavioral and Social Sciences. *Journal of Child and Family Studies*, *29*(10), 2954–2966. https://doi.org/10.1007/s10826-019-01689-x

Rodriguez, M. Y., DePanfilis, D., & Lanier, P. (2019). Bridging the gap: Social work insights for ethical algorithmic decision-making in human services. *IBM Journal of Research and Development*, *63*(4/5), 8:1-8:8. https://doi.org/10.1147/JRD.2019.2934047

Schneider, D., & Seelmeyer, U. (2019). Challenges in Using Big Data to Develop Decision Support Systems for Social Work in Germany. *Journal of*

Technology in Human Services, *37*(2–3), 113–128. https://doi.org/10.1080/15228835.2019.1614513

Schofield, P. (2017). Big data in mental health research – do the *ns* justify the means? Using large data-sets of electronic health records for mental health research. *BJPsych Bulletin*, *41*(3), 129–132. https://doi.org/10.1192/pb.bp.116.055053

Schwartz, I. M., York, P., Nowakowski-Sims, E., & Ramos-Hernandez, A. (2017). Predictive and prescriptive analytics, machine learning and child welfare risk assessment: The Broward County experience. *Children and Youth Services Review*, *81*(C), 309–320.

Séroussi, B., Hollis, K. F., & Soualmia, L. F. (2020). Transparency of Health Informatics Processes as the Condition of Healthcare Professionals' and Patients' Trust and Adoption: The Rise of Ethical Requirements. *Yearbook of Medical Informatics*, *29*(1), 7–10. https://doi.org/10.1055/s-0040-1702029

Sezgin, E. (2023). Artificial intelligence in healthcare: Complementing, not replacing, doctors and healthcare providers. *DIGITAL HEALTH*, *9*, 20552076231186520. https://doi.org/10.1177/20552076231186520

Sharma, N., & Shambharkar, P. G. (2024). A Systematic Literature Review of the Emerging Technologies used in Securing Healthcare Data. *2024 12th*

International Conference on Internet of Everything, Microwave, Embedded, Communication and Networks (IEMECON), 1–12. https://doi.org/10.1109/IEMECON62401.2024.10846068

Siala, H., & Wang, Y. (2022). SHIFTing artificial intelligence to be responsible in healthcare: A systematic review. *Social Science & Medicine*, *296*, 114782. https://doi.org/10.1016/j.socscimed.2022.114782

Simpson, J. E., Haider ,S., & and Giddings, L. (2024). Development of a virtual reality simulation for practitioners. *Social Work Education*, *43*(8), 2386–2399. https://doi.org/10.1080/02615479.2023.2258136

Singh, V. (2025). Enabling Seamless Human-AI Interaction and Effective Teaming. *International Journal of Intelligence Science*, *15*(03), 97–102. https://doi.org/10.4236/ijis.2025.153005

Stone, C. (2023). Artificial intelligence in social work practice education. The potential use of Generative AI for learning. *The Journal of Practice Teaching and Learning*, *20*(3). https://doi.org/10.1921/jpts.v20i3.2192

Tjondronegoro, D. W. (2024). *Strategic AI Governance: Insights from Leading Nations* (Version 1). arXiv. https://doi.org/10.48550/ARXIV.2410.01819

Trocin, C., Mikalef, P., Papamitsiou, Z., & Conboy, K. (2023). Responsible AI for Digital Health: A Synthesis and a Research Agenda. *Information Systems Frontiers*, *25*(6), 2139–2157. https://doi.org/10.1007/s10796-021-10146-4

University of Oxford, Institute of Ethics in AI,. (2025). *Oxford Statement on the responsible use of generative AI in Adult Social Care | Ethics in AI*. Oxford Statement on the Responsible Use of Generative AI in Adult Social Care. https://www.oxford-aiethics.ox.ac.uk/oxford-statement-responsible-use-generative-ai-adult-social-care

Van MerriÃ«nboer, J. J. G., & Sweller, J. (2010). Cognitive load theory in health professional education: Design principles and strategies: Cognitive load theory. *Medical Education*, *44*(1), 85–93. https://doi.org/10.1111/j.1365-2923.2009.03498.x

Vellido, A. (2019). Societal Issues Concerning the Application of Artificial Intelligence in Medicine. *Kidney Diseases (Basel, Switzerland)*, *5*(1), 11–17. https://doi.org/10.1159/000492428

Victor, B. G., Perron, B. E., Sokol, R. L., Fedina, L., & Ryan, J. P. (2021). Automated Identification of Domestic Violence in Written Child Welfare Records: Leveraging Text Mining and Machine Learning to Enhance Social Work

Research and Evaluation. *Journal of the Society for Social Work and Research*, *12*(4), 631–655. https://doi.org/10.1086/712734

Vo, V., Chen, G., Aquino, Y. S. J., Carter, S. M., Do, Q. N., & Woode, M. E. (2023). Multi-stakeholder preferences for the use of artificial intelligence in healthcare: A systematic review and thematic analysis. *Social Science & Medicine*, *338*, 116357. https://doi.org/10.1016/j.socscimed.2023.116357

Walsh, C. G., Chaudhry, B., Dua, P., Goodman, K. W., Kaplan, B., Kavuluru, R., Solomonides, A., & Subbian, V. (2020). Stigma, biomarkers, and algorithmic bias: Recommendations for precision behavioral health with artificial intelligence. *JAMIA Open*, *3*(1), 9–15. https://doi.org/10.1093/jamiaopen/ooz054

Yeng, P., Yang, B., & Snekkenes, E. (2019). Observational Measures for Effective Profiling of Healthcare Staffs' Security Practices. *2019 IEEE 43rd Annual Computer Software and Applications Conference (COMPSAC)*, 397–404. https://doi.org/10.1109/COMPSAC.2019.10239

Yin, H. (2021). Role of Artificial Intelligence Machine Learning in Deepening the Internet Plus Social Work Service. *Mathematical Problems in Engineering*, *2021*, 1–10. https://doi.org/10.1155/2021/6915568

Yousif, N., Youssef, E., & Gad, S. (2024). E-Kalaiva AI Technology in the Education of Social Work Students: Meeting the Sustainable Development Goals. *European Journal of Education*. https://doi.org/10.1111/ejed.12889

Zetino, J., & Mendoza, N. (2019). Big Data and Its Utility in Social Work: Learning from the Big Data Revolution in Business and Healthcare. *Social Work in Public Health*, *34*(5), 409–417. https://doi.org/10.1080/19371918.2019.1614508

Ziar, P. Q. (2025). Impact of AI-Based Tools on Writing Skills. *Journal of Research in Education*, *1*, 97–112. https://doi.org/10.3126/jore.v1i1.78725