



Query title	The Role and Use of Artificial Intelligence (AI) in Disability Inclusion
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Date	September 2025
Query	 What evidence, research, and examples exist on the use of AI to support disability inclusion across different sectors? Which sectors are best covered in AI and development research, and what gaps remain? Where possible, include both positive and negative examples from Northern and Southern countries, with relevance to low-resource settings. Please comment on quality of evidence and research methods. What opportunities and emerging trends should FCDO be aware of to effectively engage with AI-driven solutions for disability inclusion? Consider both risks and challenges, as well as innovative positive applications. What are the key risks and ethical considerations associated with AI in disability inclusion, particularly in development and humanitarian contexts? This includes considerations for assistive technology, large language models, and other AI-driven solutions. Who are the key actors leading, financing, and supporting research on AI and disability inclusion? How are private sector players, charities, and traditional funders/universities shaping this space?
Enquirer	FCDO

1. Introduction/overview and objective of assignment

This query provides an introductory overview of the role and use of AI in Disability Inclusion work globally. It first looks at what evidence, research, and examples exist on the use of AI to support disability inclusion across different sectors, focusing particularly on the fields of education, health, employment, and humanitarian response. It then considers the opportunities created by AI for the inclusion of people with disabilities, before looking at the risks and challenges posed by AI. The query concludes by providing a light-touch mapping of the key actors working on disability inclusion and AI, including those involved in programming, financing, and research. The query draws on examples, actors, and trends from both the Global North and Global South.

All findings and discussion within this report are framed by an understanding that, while Al holds huge potential in terms of enhanced and new assistive technologies, there is a risk that Al will exacerbate an already significant digital divide for people with disabilities. People with disabilities globally are less likely to own or use a smartphone or to be connected to the internet. There is also a risk that Al will exacerbate existing geographical, economic, and social digital divides: between Global North and Global South countries, between areas with greater/lesser connectivity, and between people with more/less digital and technological understanding. These disparities and risks are reflected in both the current research landscape and data sources used to train Al models, which have focused primarily on higher income contexts and able-bodied populations within the Global North. The report concludes with a set of concise recommendations, which recognise inclusion as a fundamentally social – rather than





technological – process.¹ As such, the recommendations include a focus on how the potential of Al can be harnessed without leaving behind people with disabilities and others who are already technologically marginalised.

2. Methodology

This rapid research query was carried out over 10 days in March and July 2025. Given the rapidly developing nature of AI, researchers prioritised sources published within the last 2-4 years where possible. Material was included from the following sources:

- Google and relevant electronic databases (e.g. PubMed, Science Direct, Google Scholar) for priority sources using a selection of key search terms.
- Google, to identify recent online articles, blog posts, and discussions relating to disability inclusion and AI, including those posted by civil society actors working in this space.
- Review of key disability evidence portals and resource centres.

3. Findings

3.1 What evidence, research and examples exist on the use of AI to support disability inclusion across sectors? Which sectors are best covered in AI and development research, and what gaps remain?

Research into the use of AI to support disability inclusion has been limited in comparison with broader discussions around the use of AI, raising concerns that AI will further contribute to an already wide digital divide.² Research into, and use of, AI technologies to support disability inclusion in the Global South is particularly sparse. The following section explores examples where disability rights have been considered across sectors in recent research or programming, or where sectoral research that is not disability-focused may nevertheless be relevant when considering disability rights and AI for that sector. It also flags where gaps in evidence, research, and programming exist. The section showcases how AI is being used in relation to education, communication, health and employment sectors.

Education

The use of Al-driven tools and aids has become increasingly common within the education sector (primarily but not solely in the Global North), particularly since COVID-19 and the remote learning trends that followed. A 2025 systemic literature review of the application of Al technologies in special education looked at studies on Al and inclusive education published globally, with studies included from Europe, the USA, Africa, Asia, and the Middle East and North Africa. The review found that Al-driven technologies that support tailored interventions for individual students' needs can significantly enhance students' academic performance, physical mobility, emotional regulation and ability to communicate. Examples included the use of a mobile app designed to teach English to Hausa-speaking students with hearing impediments; Al-driven counselling techniques for engineering students with physical disabilities in Nigeria; and the benefits of Al-supported Virtual Learning Environments in terms of fostering an engaging and supportive learning atmosphere for children with learning disabilities in Morocco.³ Al is also being used to support specific tools and aids for students with disabilities. For example, US-based

¹ UNDP (2025) '<u>Human Development Report 2025 – A matter of choice: People and possibilities in the age of AI', UNDP, p. 105</u>

² Ghai, A., Reddy, V., Swaminathan, M. (2020) '<u>Assistive technology research and disability studies from the Global</u> South: the need for synergy'

³ Melo-Lopez, V., Basantes-Andrade, A., Gudino-Mejia, C., Hernandez-Martinez, E. (2025) 'The impact of Artificial Intelligence on Inclusive Education: A Systematic Review', Education Sciences (14)(5), p. 8-10





companies such as Robokind and LuxAl are using social robotics to support emotional training for school students with autism, while wearable AI-supported devices such as Brainpower are providing support to neurodiverse individuals with social-emotional learning. EyeJustRead assistive technology is designed to support students with dyslexia, attention deficit and hyperactivity disorder, and is tailored to provide support to students themselves as well as teachers and caregivers.

Increased use of Al tools was also found to represent a number of practical and ethical challenges, however. The review specifically highlighted both how limited access is to Al-driven technologies in lowresource settings, and the current lack of research focused on the additional specific challenges that are likely to exist in such settings. Without a concerted focus on bridging geographical digital divides, countries in the Global South may encounter language barriers where tools have not been developed to work in local languages (although some companies such as BrightSign are working to improve accessibility on this front). Where Al tools are or may soon be used in education settings, their success typically stems from their ability to 'scale, personalise and optimise well-established educational methods, rather than from the Al technology alone'.4

This means that in settings where educational practices are not already inclusive, or where teachers (and parents) lack adequate technological understanding to effectively adapt and utilise AI tools in response to individual student needs, such tools may be ineffective at best and exclusionary or harmful at worst. Critics have also queried how far wearable devices such as signing gloves (gloves worn when using sign language which translate sign into vocal communication) serve the needs of users; and again, such aids are also unlikely to be available to the vast majority of students with disabilities, particularly in resourceconstrained settings.⁵ A key evidence gap relates to understanding if and how people with disabilities are inputting into the design of such tools; understanding where this is happening is key to ensuring their substantive involvement going forward.6

It is worth noting in relation to the education sector and beyond, that there is limited research and evidence on the implications of AI on children with disabilities. Analysis conducted by UNICEF of national AI strategies around the world revealed 'only a cursory mention of children and their specific needs'; the UNICEF analysis does not mention children with disabilities at all. ⁷ This is an area that needs further investigation, given the huge potential (positive and negative) impact AI is likely to have on future generations.

Communication

All technology is increasingly being applied to **communication methodologies and platforms**. The rise of social media platforms and messaging channels that allow for rapid image sharing has not historically been fully inclusive of users of visual impairments, as while screen readers can read accessible text aloud, images are not accessible without accompanying alternative (alt) text describing the image. Technology companies are increasingly using gen-Al to create alt text for a broader range of images. Facebook is using AI to improve accessibility; Microsoft has developed its 'Seeing AI' app to provide image descriptions to blind and partially sighted users (and is also working on a 'Hearing Al' app, which would translate sound into visual representations). Apps and extensions such as 'Automatic Alternative Text' use AI to read aloud

⁴ Melo-Lopez, V., Basantes-Andrade, A., Gudino-Mejia, C., Hernandez-Martinez, E. (2025) 'The impact of Artificial Intelligence on Inclusive Education: A Systematic Review', Education Sciences (14)(5), p. 12

⁵ Gautam, U., Asgar, E., Ranjan, R. (2023) 'A review on sign gloves for dumb and deaf peoples using ESP32',

International Journal of Engineering Applied Sciences and Technology 8(2), p. 307

⁶ Saphra, N., Weru, L., Shah, M. (2024) 'Why Al fairness conversations must include disabled people', Harvard Gazette, accessed 27 March 2025

⁷ Penagos, M., Kassir, S., Vosloo, S. (2020) 'National AI strategies and children: Reviewing the landscape and identifying windows of opportunity', UNICEF, p. 2





descriptions of images, including describing images in detail as requested by the user. Similarly, individuals who rely on sign language as a core communication tool can struggle to access online communication channels. All is now being used to translate sign language into written language that can be read on a device. The increasing use of Al-driven signing avatars has the potential to address the chronic lack of sign language interpreters (albeit with significant challenges and risks at this stage of development). The social enterprise SignVrse is one example of how All and inclusive design can be paired to embed real-time sign language access into digital platforms with a view to supporting more inclusive education, healthcare, and public services.

Significant gaps and challenges remain in terms of the development of inclusive and accessible Alsupported communication apps, however. Al technology consistently displays bias with regards to darker skin tones, with Al-generated images favouring lighter skin⁹ (efforts are ongoing to address this bias)¹⁰. There also remains a gap in terms of Al-driven tools that can support users with no or limited connectivity, as the majority require a steady internet connection to function. <u>Gemma 3n</u> is a good example of an Al tool designed for low-resource devices with limited RAM, as it can be used entirely offline. Gemma 3n is free, and can support disability-inclusive communication through functions such as speech recognition and translation and the interpretation of visual content for users (currently with support in over 140 languages).

Health

The use of AI in the health sector has been described as presenting a 'transformative opportunity to enhance the lives of people living with disabilities'. AI tools are already being used in relation to assistive devices, rehabilitation, diagnostics, and communication with healthcare providers, improving equity in healthcare environments. AI-driven dialogue agents are able to provide highly personalised support to people with cognitive disabilities such as Parkinson's and dementia, in ways that improve individuals' quality of life. To individuals with physical disabilities, advancements in AI-enabled robotics show promise in terms of helping individuals to achieve independence and autonomy.

In low- and middle-income settings, AI has the potential to improve and accelerate progress towards achieving Sustainable Development Goal 3, 'Ensure healthy lives and promote wellbeing at all ages'¹⁴, and merits further exploration with regards to disability. For example, evidence suggests AI could be used to improve large-scale patient diagnosis, and to support healthcare professionals (of which there is a chronic shortage in many low- and middle-income settings) to effectively triage and diagnose patients. ¹⁵ Unitaid's \$41 million project implemented with the Clinton Health Access Initiative screened over 100 million women for cervical cancer in 14 low- and middle-income countries between

⁸ Naert, L., Larboulette, C., Gibet, S. (2020) '<u>A survey on the animation of signing avatars: from sign representation to utterance synthesis</u>', Computers & Graphics 92

⁹ Yang, Y. (2025) 'Racial bias in Al-generated images', Al & Society

¹⁰ See for example, Johnson, V. (2025) 'Reducing demographic bias in clinical AI models with color space augmentation', HCP Live, accessed 7 July 2025

¹¹ Olawade, D., et al. (2025) '<u>The role of artificial intelligence in enhancing healthcare for people with disabilities</u>', Social Science and Medicine 364

¹² Olawade, D., et al. (2025) '<u>The role of artificial intelligence in enhancing healthcare for people with disabilities</u>', Social Science and Medicine 364

¹³ Olawade, D., et al. (2025) '<u>The role of artificial intelligence in enhancing healthcare for people with disabilities</u>', Social Science and Medicine 364

¹⁴ Singh, J. (2019) '<u>Artificial Intelligence and global health: opportunities and challenges</u>', Emerging Topics in Life Sciences 3(6), p. 743

¹⁵ Singh, J. (2019) '<u>Artificial Intelligence and global health: opportunities and challenges</u>', Emerging Topics in Life Sciences 3(6), p. 743





2019 and 2023. In addition to more traditional screening and sampling methods, the programme supported the development of AI assessment tools with the potential to improve the accuracy of visual screening methods and support earlier detection. In Ghana, the MinoHealth AI Lab has developed an AI system to automate the diagnosis of different chest conditions, in addition to systems for diagnosing and screening of infectious diseases such as malaria and COVID-19. Despite this potential, there are significant risks of increased use of AI in the health sector from a disability inclusion perspective — due in large part to a) an absence of data on people with disabilities (and on other historically marginalised groups) in low- and middle-income settings, and b) a general lack of disability-specific expertise amongst healthcare professionals who would be primarily responsible for ensuring any AI tools are used effectively and inclusively.

The use of AI chatbots is becoming increasingly common across Africa as a means for individuals to access health-related information and advice, particularly since COVID-19¹⁸. Such technology has specific potential for people with disabilities, who may struggle to physically access quality, affordable healthcare in a timely manner. However, there is a gap in evidence around detailed usage, accessibility (including from a language perspective), and impact of such technologies, including for people with disabilities. This would merit further research.

The research that exists around AI in the health sector, including in relation to people with disabilities, emphasises both the risks and current limitations of overreliance on AI. The success of the Unitaid project was in part because AI was piloted within a broader intervention package; relying too heavily on AI in isolation risks clinicians engaging in 'automation bias', where they do not consider whether the solution best meets the needs of the patient. This is particularly relevant for people with disabilities, who may fall outside of what a machine learning-driven AI tool considers to be 'typical'. The World Health Organisation's 'Ethics and Governance of Artificial Intelligence for Health' guide is helpful in flagging the opportunities, risks, and knowledge gaps around the use of AI within the health sector, including in lowand middle-income settings. Further research (and subsequent development) is needed to address the fact that most AI machine learning is currently based on health data from able-bodied populations in the Global North, and that populations and healthcare providers in the Global South may be less trusting and willing to 'buy in' to AI tools in settings where people are unfamiliar with emergent technologies like AI.²¹

Employment

People with disabilities face significant challenges in gaining and maintaining employment and Al has the potential to either exacerbate or mitigate these challenges – albeit primarily in the Global North at this stage. A growing number of Al-driven tools exist that have the potential, or are already being used, to support people with disabilities in the labour market. A 2023 study identified 142 examples (the majority in Global North settings) of Al-driven solutions that are either being used or are in development and which support disability inclusion either as their primary objective or as a byproduct.²² These tools can

¹⁶ Unitaid (March 2023) 'One million women screened for cervical cancer in low- and middle-income countries', accessed 24 March 2025

¹⁷ Singh, J. (2019) '<u>Artificial Intelligence and global health: opportunities and challenges</u>', Emerging Topics in Life Sciences 3(6), p. 746

¹⁸ Phiri, M., Munoriyarwa, A. (2023) '<u>Health chatbots in Africa: scoping review</u>', Journal of Medical Internet Research

¹⁹ World Health Organisation (2021) 'Ethics and governance of artificial intelligence in health: WHO guidance', p. 7

²⁰ World Health Organisation (2021) 'Ethics and governance of artificial intelligence in health: WHO guidance'

²¹ Singh, J. (2019) '<u>Artificial Intelligence and global health: opportunities and challenges</u>', Emerging Topics in Life Sciences 3(6), p. 744

²² OECD (2023) '<u>Using AI to support people with disability in the labour market: opportunities and challenges</u>', OECD Artificial Intelligence Papers 7. A full list of the tools identified can be found in Annex A, p.70-88





be categorised into four groups: disability-centred solutions (providing workarounds, e.g. live captioning, speech recognition algorithms; or directly addressing disability, e.g. gait-correction prosthetics); environment-adaptation solutions (making workplaces and content more accessible); meta-level accessibility tools (e.g. processes that themselves foster accessibility, such as improving efficiency of workplace accommodation processes); and tools that unlock work opportunities previously unavailable to people with disabilities.²³ There is some evidence that AI tools are starting to influence hiring in a small number of Global South contexts²⁴, and are being used to improve accessibility within the workplace (for example, the use of speech-to-text application Verbit by a private sector company in Brazil²⁵). The use of AI tools in relation to employment is likely to grow in coming years, particularly in urban and middle-income settings, and understanding what this may mean from a disability inclusion perspective would help to ensure people with disabilities are not negatively impacted. However, it is worth noting that in contexts where labour is primarily informal or that lack the infrastructure to support AI technologies, AI hiring and employment tools are unlikely to impact people with disabilities in the near term.

Al has the potential to influence people with disabilities' relationship with the labour market both in terms of hiring processes, and because of the ways AI has supported a shift in how people work; as above, these developments do not currently reflect the realities of the majority of employment contexts in the Global South (although there are signs they may become more commonplace in urban and middle-income settings in the near future). There are now numerous Al-powered recruitment agencies that are designed to link people with disabilities with employment opportunities. For example, Specialisterne is an international organisation that helps businesses find positions that are suitable for neurodiverse candidates; such initiatives hold significant potential for people with autism, for example, an estimated 85 percent of whom are not employed.²⁶ Other platforms that use disability-friendly algorithms include Hire Autism and Inclusively; these platforms combine allowing candidates to broadly list their strengths, interests and needs, with a drive towards attitudinal change to persuade employers to use their platforms.²⁷ Meanwhile, Al's potential to assist human employees, along with increased remote working, can mean certain roles are more accessible to people with disabilities than they were previously.²⁸ For example, the company Ultranauts provides onshore engineering and assurance services, delivered by a fully remote, 75 percent neurodivergent workforce, whose own experience of creating a fully inclusive workplace led them to develop Team X, an Al-powered Collaborative Intelligence system that supports fully inclusive team building and management.

Despite the above factors, **significant challenges remain in terms of ensuring AI does not contribute to more discriminatory hiring practices.** Effective and transparent diversity policies, based on further research and data, is needed²⁹; the risks of not further developing these are discussed below. It is also

²³ OECD (2023) '<u>Using AI to support people with disability in the labour market: opportunities and challenges</u>', OECD Artificial Intelligence Papers 7, p. 8

²⁴ See for example, Giwa, F., Ngepah, N. (2024) '<u>Artificial intelligence and skilled employment in South Africa:</u>
<u>Exploring key variables</u>', Research in Globalisation 8; Economic Times of India (Jun 2025) '<u>Indian recruiters pivot to 'quality hiring' as AI tools take hold'</u>.

²⁵ OECD (2023) '<u>Using AI to support people with disability in the labour market: opportunities and challenges</u>', OECD Artificial Intelligence Papers 7, p. 81

²⁶ Hafizov, H. (2024) '<u>The AI revolution: is it a game changer for disability inclusion?</u>', UNDP Uzbekistan, accessed 25 March 2025

²⁷ Zhuang, K., Goggin, G. (2024) 'New possibilities or problems for disability and inclusion? The case of Al and ADMs across work', Telematics and Informatics 92, p. 5

²⁸ Zhuang, K., Goggin, G. (2024) 'New possibilities or problems for disability and inclusion? The case of Al and ADMs across work', Telematics and Informatics 92, p. 5

²⁹ Welker, Y. (2023) 'How cognitive diversity in Al can help close the disability inclusion gap', World Economic Forum: Emerging Technologies, accessed 23 March 2025





worth noting that despite the rapidly changing nature of employment overall with regards to remote working and the use and influence of emerging technologies (including AI) in hiring and the workplace, relatively little evidence exists around the intersection between AI, the automation of decision making (e.g. in hiring), and disability inclusion.³⁰ **This is a research gap that would benefit from further investigation**.

Humanitarian response

While the use of AI in the humanitarian sector is not new,³¹ the rapid rise in available AI tools has driven increased discussion around how AI might support more efficient and effective humanitarian response. Gen-AI tools could for example play a critical role in rapidly analysing the huge amounts of varied information from multiple sources on which humanitarian responses are typically based.³² Networks like Tech to the Rescue are exploring how AI can be used to improve humanitarian communication and assistance, through initiatives such as their AI for Changemakers 3-year global accelerator programme that brings together AI experts and non-profit organisations to develop pro-bono AI tools to tackle global issues, including relating to disaster management and climate. However, the use of AI in emergencies poses similar challenges as in stable contexts, as AI's machine learning capabilities are limited by how representative and inclusive the data available is. Indeed, the rapid nature of decision-making in humanitarian settings poses additional risks in terms of ensuring data is used ethically, safely, and without recreating discriminatory biases, digital exclusion, or violating personal privacy.³³ The Centre for Humanitarian Data is currently exploring how AI might be effectively utilised in terms of data use in humanitarian settings.³⁴ The FCDO-funded AT2030 programme has also supported the development of a 'Human-Computer Interaction Framework for responsible AI adoption' in humanitarian contexts.³⁵

While there is increasing discussion around the use of Al within the humanitarian sector, **discussion** around its use in relation to disability inclusion remains extremely limited. As discussions continue around the use of Al in humanitarian settings, there is an opportunity to ensure disability inclusion is considered, drawing on evidence around the risks of bias in machine learning alongside relevant research relating to disability inclusion and data in emergencies.³⁶

3.2 What opportunities and emerging trends should FCDO be aware of to effectively engage with Al-driven solutions for disability inclusion? Consider both risks and challenges, as well as innovative positive applications.

Al holds significant potential in terms of improving access to education, including through its ability to provide personalised learning experiences based on individual needs. Al-powered tutors can help to deliver a more personalised learning experience for children with disabilities, including through tailoring content, pace, and feedback to students' specific needs.³⁷ The FCDO-supported EdTech Hub recently held a Community of Interest event on Al in Education, which focused on the possible impact of Al

³⁰ Zhuang, K., Goggin, G. (2024) 'New possibilities or problems for disability and inclusion? The case of Al and ADMs across work', Telematics and Informatics 92, p. 2

³¹ OCHA (2024) 'Briefing note on Artificial Intelligence and the humanitarian sector', OCHA, p. 5

³² Fernandez-Luque, L., Imran, M. (2018) '<u>Humanitarian health computing using artificial intelligence and social media: a narrative literature review</u>', International Journal of Medical Informatics 114

³³ OCHA (2024) 'Briefing note on Artificial Intelligence and the humanitarian sector', OCHA, p. 1

³⁴ OCHA (2024) 'Briefing note on Artificial Intelligence and the humanitarian sector', OCHA, p. 8

³⁵ Bhatnagar, T., Omar, M., Orlic, D., Smith, J., Holloway, C., Kett, M. (2025) 'Bridging Al and humanitarianism: An HCl-informed framework for responsible Al adoption', CHI Conference on Human Factors in Computing Systems (CHI '25), April 26-May1 2025

³⁶ See for example, UNICEF (2024) 'Innovative strategies to overcome disability data gaps for inclusive education in emergencies', UNICEF

³⁷ Get Skilled Access, 'Bridging the gap: how can Al play a part in revolutionising disability inclusion', accessed 25 March 2025





on teaching and teachers. Al-driven innovations are already being used for to improve the **accessibility of information and communication** for people with a range of disabilities. For example, technology companies are increasingly using gen-Al to create alt-text for a broader range of images, often supported by Al-driven tools that can read descriptions aloud and describe specific details from an image (e.g. a person's facial expression, the weather). Similarly, Al is now being used to translate sign language into written language that can be read on a device, and Al-driven signing avatars have the potential to fill the chronic shortage of sign language interpreters. While the majority of these apps rely on the internet, some tools are now being designed for users with limited or slow connectivity.

Al technologies have the potential to improve access to and quality of healthcare for people with a range of physical, cognitive, and neurological disabilities.⁴¹ For example, Al-enabled systems may be better equipped to diagnose illnesses and recommend treatments that are tailored to the individual, including individuals with disabilities. 42 AI is already being used in the Global North to pioneer gamechanging physical rehabilitation tools such as exoskeletons and mind-controlled prostheses, including through gen-AI (to decipher electrical nerve impulses for closer control of the prothesis) and embodied AI (in the form of robotics). It is worth noting that while such developments are becoming (and will likely continue to become) more affordable as the technologies become more established (for example, the rise of 3D printing is already reducing the cost of producing Al-supported prosthetics), the vast majority of these tools remain out of reach for most people with disabilities in all contexts, and particularly in the Global South. ⁴³ In the Global South, Al may be used to identify tuberculosis, COVID-19, and other conditions, ⁴⁴ while machine learning algorithms are able to predict health outcomes and manage chronic conditions more effectively. 45 Al is also increasingly used in relation to mental health, including as a means of improving both service provision and structured peer support, although again, there are significant risks associated with this at the current stage of development (discussed below).⁴⁶ In many low-income settings, Al tools may be able to help fill gaps left by chronic shortages of healthcare workers, in supporting with diagnosis and patient assessment, and support people with mobility restrictions to access information or communicate with medical professionals without needing to physically visit a healthcare centre.⁴⁷

Al-enabled systems can serve to address communication barriers and barriers to accessibility and independence within people with disabilities' individual environment. For example, Al-driven apps such as WheelMap and AccessNow can support personal mobility through helping people to identify accessible routes. The Al for Inclusive Urban Sidewalks project is working with Microsoft's Al for Accessibility programme to harness Al technology to improve the accessibility of sidewalks and barriers to

³⁸ For example, Hearing AI, Automatic Alternative Text

⁴¹ Olawade, D., et al. (2025) '<u>The role of artificial intelligence in enhancing healthcare for people with disabilities</u>', Social Science and Medicine 364

Social Science and Medicine 364

³⁹ Naert, L., Larboulette, C., Gibet, S. (2020) '<u>A survey on the animation of signing avatars: from sign representation to utterance synthesis</u>', Computers & Graphics 92

⁴⁰ See for example, Gemma 3n

⁴² UN General Assembly (2022) 'Rights of persons with disabilities: report of the Special Rapporteur on the rights of persons with disabilities', Human Rights Council Forty-ninth session, p. 9

⁴³ Chopra, S., Emran, T. (2024) '<u>Advances in Al-based prosthetics development: editorial</u>', International Journal of Surgery

⁴⁴ World Health Organisation (2021) '<u>Ethics and governance of artificial intelligence in health: WHO guidance</u>', p. 6 ⁴⁵ Olawade, D., et al. (2025) 'The role of artificial intelligence in enhancing healthcare for people with disabilities',

⁴⁶ Gooding, P., Kariotis, T. (2021) '<u>Ethics and law in research on algorithmic and data-driven technology in mental health care: scoping review</u>', JMIR Publications

World Health Organisation (2021) 'Ethics and governance of artificial intelligence in health: WHO guidance', p. 7
 UN General Assembly (2022) 'Rights of persons with disabilities: report of the Special Rapporteur on the rights of persons with disabilities', Human Rights Council Forty-ninth session, p. 8





mobility. The FCDO-funded <u>AT2030</u> programme is supporting the <u>Centre for Digital Language Inclusion</u>, which is working to make automatic speech recognition (ASR) work for non-standard speech – including in 10 African languages. Through partnering with local institutions they are supporting the innovation of apps and other tools to aid more culturally appropriate communication and are empowering local communities to create their own AI and data models..⁴⁹ AT2030 also developed the <u>Project my Voice, My Words!</u> project alongside the Global Disability Innovation Hub, UCL and the University of Ghana, to support the collection of non-standard speech in Ghanaian languages; the project is based on a study of Google's <u>Relate</u> app, and is now partially funded by Google.

Al holds promise with regards to the employment of people with disabilities (although as noted above, employment-related Al innovations are currently unlikely to impact workers in informal, remote, or low-connectivity contexts in the short term). It is estimated that unemployment among persons with disabilities is as high as 80 percent in some countries, despite persistent labour shortages in those countries. Generative Al-based sites like OurAbility can support individuals with disabilities to find and succeed in jobs they might not previously have accessed. Within the workplace, Al is being used to make workplaces 'smarter' and more disability-inclusive – for example, through Al-powered ergonomic software that reminds users to take breaks and can recommend assistive technologies to make specific tasks easier.

Al technology is developing more slowly in the Global South than the Global North, presenting challenges but also opportunities in terms of development and investment around disabilityinclusive AI. The Africa Union's 'Continental AI Strategy', adopted in 2024, includes a specific commitment to ensuring respect for 'diversity, inclusivity and African culture and values (e.g. the inclusion of women as well as vulnerable persons including migrants and persons with disabilities).⁵² Around 100 AI startups have emerged across Africa, with significant numbers located in Nigeria, Kenya, and South Africa.53 In addition, AI research labs and hubs such as the Women in Machine Learning and Data Science hub and National Information Technology Development Agency in Nigeria, and the Responsible Al Lab at Kwame Nkrumah University in Ghana are investing in Al research, innovation, and leadership development in Africa. Currently, AI-based assistive technologies in Africa have primarily been developed outside of Africa, and their use is not widespread due to a lack of access to smartphones, internet access, and/or digital skills.⁵⁴ However, there are some examples of AI technology being harnessed specifically for lowincome or limited-connectivity contexts: for example, an Al-driven tool for conducting ultrasounds, which requires no internet or infrastructure beyond a smartphone and can be operated with minimal training, was found to be highly accurate when tested in Zambia and the USA.55 There is also guidance and recommended action available for governments and the private sector in the Global North, as to how to

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⁴⁹ Cave, R. (2025) '<u>Inclusive voices: advancing language technology for people with impaired speech in local languages</u>', AT2030, accessed 6 July 2025

⁵⁰ UN Department of Economic and Social Affairs, 'Factsheet on persons with disabilities', accessed 23 March 2025

⁵¹ See for example, <u>TuMeke Ergonomics</u>, <u>VelocityEHS</u>, <u>Benchmark Gensuite</u>

⁵² African Union (2024) 'Continental artificial intelligence strategy: harnessing Al for Africa's development and prosperity', p. 32

⁵³ Holloway, C. (2024) 'Report on three roundtable discussions exploring the challenges of AI for inclusive development in Africa', AT2030, p. 8

⁵⁴ Holloway, C. (2024) 'Report on three roundtable discussions exploring the challenges of AI for inclusive development in Africa', AT2030, p. 9

⁵⁵ Gomes, R., Vwalika, B., Lee, C., Willis, A., Sieniek, M., Price, J., Chen, C., Kasaro, M., Taylor, J., Stringer, E., McKinney, S., Sindano, N., Dahl, G., Goodnight, W., Gilmer, J., Chi, B., Lau, C., Spitz, T., Saensuksopa, T., Liu, K., Tiyasirichokchai, T., Wong, J., Pilgrim, R., Uddin, A., Corrado, G., Peng, L., Chou, K., Tse, D., Stringer, J., Shetty, S. (2022) 'A mobile-optimised artificial intelligence system for gestational age and fetal malpresentation assessment', Communications Medicine





effectively and meaningfully partner with countries and organisations in the Global South in the development of a global AI ecosystem.⁵⁶

3.3 What are key risks and ethical considerations associated with AI in disability inclusion, particularly in development and humanitarian contexts? This includes considerations for assistive technology, large language models, and other AI-driven solutions.

While AI holds huge potential in terms of enhanced and new assistive technologies, **there is a risk that AI will exacerbate an already significant digital divide for people with disabilities.** People with disabilities globally are less likely to own or use a smartphone or to be connected to the internet. In Kenya, for example, people with disabilities are 11 percent less likely to own a phone, 36 percent less likely to be aware of mobile internet, and 85 percent less likely to use it. People with disabilities with intersecting marginalised identities are less likely to have mobile and internet access: for example, in low- and middle-income countries, women comprise up to three-quarters of people with a disability, and yet are significantly less likely to own a mobile phone or use mobile internet than men with disabilities. As gen-AI tools are increasingly available to individuals with mobile phone and internet access, and because machine learning typically requires an internet connection to gather sufficient data, there is a risk that women, people in rural communities, and the very poor and people with disabilities across all of these groups, will be left behind.

The risk of AI increasing the digital divide is particularly acute at the global level, as low- and many middle-income countries are simply not ready to adopt increasingly mainstream AI systems and tools; and in many cases, these tools have not been designed with users from these contexts in mind. At a 2024 roundtable on the challenges of AI for inclusive development in Africa, participants flagged infrastructure challenges, unreliable internet, lack of accessible services, limited digital access and skills, and an inaccessible built environment as all significant barriers to building both the infrastructure and skillset necessary to allow for widespread use of AI tools across the continent.⁶⁰

The majority of patents for conventional and emerging assistive technologies – including those supported by AI – are filed in countries with a high or very high Human Development Index (HDI) ranking, meaning these technologies often fail to consider the diverse realities (including infrastructural and cultural) of people with disabilities in lower HDI contexts. Google Relate, for example, requires access to a smartphone that meets minimum specifications and a reliable internet connection – likely negating the fact that it is free to use for many users with disabilities. AI-supported technologies filed in Oxford Insights' Government AI Readiness Index 2023 highlights significant disparities between and within different regions. While some AI tools (such as Gemma 3n) are designed to mitigate some of the challenges around limited connectivity, there nevertheless remains an overwhelming risk that people with disabilities in lower income countries will not have equitable access to the AI innovations driving inclusion in higher income contexts.

In addition to the risks posed by inequitable access, **AI risks perpetuating the exclusion of individuals and groups that it considers to be 'outlier data'.** Globally, around one-third of the global population are

⁵⁶ See for example, Wicker, K. (2024) '<u>Developing AI ecosystems in the Global South</u>', The Wilson Centre

⁵⁷ UNDP (2025) '<u>Human Development Report 2025 – A matter of choice: People and possibilities in the age of Al', UNDP, p. 105-6</u>

⁵⁸ Humphries-Waa, K., Palmer, T., Binder, G., Tyers-Chowdhury, A. (2022) '<u>Accessible and inclusive digital solutions for girls with disabilities</u>', UNICEF

⁵⁹ Humphries-Waa, K., Palmer, T., Binder, G., Tyers-Chowdhury, A. (2022) '<u>Accessible and inclusive digital solutions for girls with disabilities</u>', UNICEF

⁶⁰ Holloway, C. (2024) 'Report on three roundtable discussions exploring the challenges of AI for inclusive development in Africa', AT2030, p. 9-11

⁶¹ UNDP (2025) '<u>Human Development Report 2025 – A matter of choice: People and possibilities in the age of AI'</u>, UNDP, p. 106

⁶² UNDP (2025) '<u>Human Development Report 2025 – A matter of choice: People and possibilities in the age of AI'</u>, UNDP, p. 107





digitally unconnected, and thus largely unaccounted for in machine learning models. ⁶³ The majority of those who are unconnected live in low- and middle-income countries where 80 percent of people with disabilities live. ⁶⁴

Within the machine learning data available there exist historical biases and distortions that serve to discriminate against or leave out people with disabilities. For AI tools based on supervised machine learning, people responsible for labelling and categorising data may introduce their own subjectiveness or overlook discrimination-based patterns, while unsupervised machine learning will reflect its data sets' lack of statistical input and representation (including relating to people with disabilities) without proactive mitigation. This means that AI tools risk perpetuating discrimination against people with disabilities as a whole, or against specific types and manifestations of disability. For example, speech recognition systems may not understand commands made by a person with down syndrome with emotion-processing algorithms may misread or misinterpret facial expressions of people with autism, who have experienced a stroke, have Williams syndrome, or other people with atypical facial expressions. Gen-AI may be unlikely to generate images of people with disabilities (or to go beyond more common images of disability such as someone in a wheelchair) because people with disabilities are not typically employed as models. The vast majority of AI tools and systems have been trained on data collected from the Global North and high-income countries, raising concerns about the applicability of these tools in lower income contexts where individuals will have very different levels of access to economic, social, and medical services and support.

Existing datasets also present challenges with regards to addressing the intersectional needs of people with disabilities. For example, girls are typically diagnosed with autism and other intellectual disabilities at a much lower rate than boys, while few urban data sets include data on gender, meaning girls with disabilities are likely to be underrepresented in machine learning in these settings.⁶⁹

Al systems that are widely adopted but not based on a design-for-all approach risk fundamentally impacting the ways in which people with disabilities interact with the state and key service providers. A 2022 report by the UN Special Rapporteur on the rights of persons with disabilities noted how in some instances, AI has been used as a gatekeeping tool for social protection benefits, including unemployment and healthcare assistance. Data sets and algorithms that underpin AI screening tools reflect the biases and discriminatory attitudes that already exist regarding people with disabilities. They also reflect other societal biases, for example, the landmark Gender Shades study, found that many commercial AI systems used to label binary genders based on facial imaging did not work well for women with darker skin. There is therefore a real risk that people with disabilities, particularly those with additional intersecting marginalised identities, will be further excluded from accessing services and decision-making spaces.

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⁶³ Kallot, K. (Feb 2025) 'The Global South needs to own its Al revolution', accessed 27 March 2025

World Health Organisation (2021) 'Ethics and governance of artificial intelligence in health: WHO guidance', p. ix
 Welker, Y. (2023) 'Generative AI holds great potential for those with disabilities – but it needs policy to shape it',
 World Economic Forum: Opinion, accessed 26 March 2025

⁶⁶ European Disability Forum (2022) '<u>Accessible and non-discriminatory artificial intelligence</u>', accessed March 23 2025

⁶⁷ Guo, A., Kamar, E., Vaughan, J., Wallach, H., Morris, M. (2019) '<u>Towards fairness in Al for people with disabilities: a research roadmap</u>', Carnegie Mellon University, p. 2

⁶⁸ World Health Organisation (2021) 'Ethics and governance of artificial intelligence in health: WHO guidance', p. ix ⁶⁹ Ratto, A., Kenworthy, L., Yerys, B., Bascom, J., Wieckowski, A., White, S., Wallace, G., Pugliese, C., Schultz, R., Ollendick, T., Scarpa, A., Seese, S., Register-Brown, K., Martin, A., Athony, L. (2018), 'What about the girls? Sexbased differences in autistic traits and adaptive skills', Journal of Autism Development Discord

⁷⁰ UN General Assembly (2022) 'Rights of persons with disabilities: report of the Special Rapporteur on the rights of persons with disabilities', Human Rights Council Forty-ninth session, p. 9

⁷¹ Park, J., Bragg, D., Kamar, E., Morris, M. (2021) '<u>Designing an online infrastructure for collecting AI data from people with disabilities</u>', p. 2





Al tools are increasingly used in recruitment processes, with the aim of making identifying suitable candidates more efficient and less vulnerable to human bias. However, machine learning-based Al recruitment is typically reliant on data sets that do not include people with disabilities (or individuals from other underrepresented groups), as these individuals are less likely to have been hired in the past. This means it is less likely that candidates with disabilities will be seen as suitable for employment. Practical examples of this may include Al tools' exclusion of candidates with facial expressions, body language, or ways of speaking, that do not fit within the statistical average. Even if a company has a strong history of hiring people with disabilities, the diversity and variability of how disabilities present mean certain types of disability are likely vulnerable to being screened out by Al tools. In addition, Al recruitment can create accessibility barriers rather than dismantling them: for example, Al chatbots can be inaccessible to candidates using screen readers. While many jobs and job markets are yet to adopt Al in their recruitment, Al-informed recruitment appears to be the future, with 90 percent of companies in the USA now using some form of Al hiring tools. Failure to consider the implications of the rise of Al in hiring practices poses a significant risk for people with disabilities' access to the labour market.

A key ethical consideration around Al and disability inclusion relates to an overall lack of transparency around where and how Al is used, and based on what information. Al systems are often hidden from users, to protect intellectual property rights and/or to improve user experience. It is often unclear what inputs machine learning is based on, and in some cases foundational datasets are deleted or not collated for data protection reasons. ⁷⁶ Current Al ethnics and audit tools are unlikely to find biases against minorities, ⁷⁷ and developers of Al recruitment technology are not required to prove their products are equitable. This places an unfair and unrealistic burden on individuals to prove discrimination has taken place, often in relation to analysis and screening processes they are not aware even exist. ⁷⁸

This lack of transparency is compounded by two factors: a **high barrier to entry with regards to advocacy around AI**, and a **lack of proactive, substantive consultation with people with disabilities** by AI developers. Given the novel, rapidly developing, technical nature of AI, many disability advocates may be afraid to campaign for inclusive AI due to a perceived lack of technical understanding of how AI works. ⁷⁹ On the other hand, developers are not consistently or substantively engaging people with disabilities in the design of AI tools. A recent survey found that only 7 percent of disabled respondents believe there is adequate representation of people with disabilities in the development of AI tools, even though 87 percent would be willing to provide feedback to developers to improve accessibility and inclusivity of products. ⁸⁰ As developers race to achieve 'first mover' status with regards to the latest AI system or tool, there is a risk that inclusivity is not considered from the outset, and thus that AI's rise

⁷² UN Special Rapporteur on the Rights of Persons with Disabilities, '<u>Artificial intelligence and the rights of persons with disabilities</u>', UN, accessed 24 March 2025

⁷³ Feliz, A. (2023) 'Ensuring artificial intelligence systems respect disability rights', European Disability Forum, accessed 22 March 2025

⁷⁴ James, N. (2023) '<u>Artificial intelligence, inclusive education and employment: opportunities and challenges</u>', European Disability Forum, accessed 24 March 2025

⁷⁵ James, N. (2023) '<u>Artificial intelligence, inclusive education and employment: opportunities and challenges</u>', European Disability Forum, accessed 24 March 2025

⁷⁶ UN General Assembly (2022) 'Rights of persons with disabilities: report of the Special Rapporteur on the rights of persons with disabilities', Human Rights Council Forty-ninth session, p. 8

⁷⁷ James, N. (2023) 'Artificial intelligence, inclusive education and employment: opportunities and challenges', European Disability Forum, accessed 24 March 2025

⁷⁸ Disability Ethical? AI, 'Disability Ethical? AI', accessed 27 March 2025

⁷⁹ Noori, K. (2023) '<u>Understanding artificial intelligence and how it affects the disability community</u>', European Disability Forum, accessed 27 March 2025

⁸⁰ Fable, 'Insights: Al and accessibility', accessed 25 March 2025





mirrors previous trends around inaccessible access to technology and online spaces.⁸¹ This failure to engage people with disabilities from the outset has significant implications for longer term inclusivity: the relative cost of retrofitting a service or tool to become inclusive increases the more time has passed, and can reach up to 10,000 times the cost of original development.⁸²

It is also worth noting the significant risk of Al worsening the discrimination, marginalisation, and harassment people with disabilities may experience in their day to day lives. All is already driving more sophisticated forms of technology-facilitated gender-based violence, which women and girls, including women and girls with disabilities, are most likely to experience.⁸³ Al-driven surveillance data may be misused by state actors or private companies, putting already marginalised groups at particular risk. For example, in 2019 the Government of Uganda partnered with Chinese technology giant Huawei to launch a facial recognition surveillance system, which will have the capability to identify and track the identities of people in public space⁸⁴. Given the curtailments to Uganda's civic space in recent years, such technologies may pose a security risk to human rights advocates; lesbian, gay, bisexual, transgender, queer, intersex, asexual plus (LGBTQIA+) individuals, and women human rights defenders, including those with disabilities. For people with disabilities – who represent an extremely heterogenous group with distinct and varied needs – using AI may present an unfair trade-off between accessibility and privacy, as existing privacy protections are insufficient to ensure their anonymity (meaning AI use may increase their risk of surveillance and discrimination).85 The WHO Guidance on the Ethics and Governance of AI for Health raises concerns around the generation of health data to improve AI machine learning, noting the risks associated with ongoing 'biosurveillance' of health data and other biometrics. 86 There have been recent efforts to recognise and respond to such risks – for example, in the 2024 European Artificial Intelligence Act, which emphasises the need for inclusivity and sets out regulations for AI systems it assesses as posing an unacceptable level of risk, including to people with disabilities.⁸⁷

3.4. Who are the key actors leading, financing, and supporting research on AI and disability inclusion? How are private sector players, charities, and traditional funders/universities shaping this space?

This research found a limited number of actors involved in leading, financing, and supporting research on AI and disability inclusion. A large proportion of the key actors identified are not focused on this area specifically, instead including disability in their wider research into AI and the social benefits it can bring. A significant proportion of research and innovation in this area also focuses on the role of AI in assistive technology, especially for private sector actors. The leading actors focusing specifically on research on AI and disability inclusion are Multilaterals such as the Organisation for Economic Cooperation and Development (OEDC); civil society, particularly the European Disability Forum and Zero Project; research initiatives such as the Centre for Research and Education on Accessible Technologies and Experiences CREATE initiative at the University of Washington; and the UK Foreign Commonwealth and Development Office, in particular through its AI4D programme.

⁸¹ For example, it is estimated that <u>less than 3%</u> of the top one million websites in the world offer a fully accessible experience.

⁸² Centre for Inclusive Design (2019) 'The benefit of designing for everyone', PwC Australia

⁸³ UN Women (2025) 'FAQs: digital abuse, trolling, stalking, and other forms of technology-facilitated violence against women', UN Women

⁸⁴ Privacy International (2020) 'Huawei infiltration in Uganda', accessed 26 March 2025

⁸⁵ UNDP (2025) '<u>Human Development Report 2025 – A matter of choice: People and possibilities in the age of AI'</u>, UNDP, p. 109

⁸⁶ World Health Organisation (2021) 'Ethics and governance of artificial intelligence in health: WHO guidance', p. 10

⁸⁷ The European Disability Forum has <u>helpful guidance</u> on how to monitor implementation of the European Al Act.





Private Sector

Organisation	Focus of work
Google	 Project Euphonia is a Google Research initiative working to make speech recognition software more accessible for individuals with non-standard speech through gathering speech data from users with non-standard speech and using this data to improve better voice recognition into tools like Google Assistant. Google Relate is a communication app aimed at assisting people with non-standard speech to communicate in real-time through providing a text-to-speech function, speech recognition, and personalised voice options. Research and creation of Al-driven innovations designed to improve accessibility e.g. Lookout initiative using Al to support the blind and low-vision community. Artificial Intelligence for Social Good - Applying Al-driven solutions to help people reach their full potential through an accessibility focused workstream Financing European Disability Forum project 'Empowered by Al'
IBM	 IBM has some limited work in this area: 2018 initiative involving understanding and promoting fairness in AI models used to support business workflows and decisions for things such as loan applications. Work on ways to develop AI-based applications that treat people with disabilities fairly.
Microsoft	Microsoft's Al for Inclusion project provides grants to developers, non- governmental organisations (NGO's), academics, researchers, and inventors to support projects that use technology to empower people with disabilities.

Multilaterals

Organisation	Focus of work
OECD	The OECD undertakes research into "Using AI to support people with disabilities in the labour market", looking at the dual nature of AI as a potential facilitator and barrier to the employment of people with disabilities.
	OCED's Al policy observatory includes:
	 Al Incidents Monitor (AIM) documenting Al incidents and hazards to help policymakers, Al practitioners, and stakeholders worldwide gain valuable insights into the risks and harms of Al systems. It includes many reports related to disability exclusion. National Al policies & strategies repository of over 1000 Al policy initiatives from 69 countries, territories and the European Union. 'Al Wonk' blog where the OECD Network of Experts on Al (ONE AI) and guest contributors share their experiences and research + Al Policy research library including policies which relate to disability.
European Commission (EC)	The EC has a <u>high-level expert group on artificial intelligence</u>





Equinet (European Network of Equality Bodies)	Equinet is a network of 48 Equality Bodies and has become a central stakeholder in shaping the evolving European law and policy at the intersections of Al-driven technologies and equality and discrimination. Equinet's 2020 report "Regulating for an Equal Al: A New Role for Equality Bodies" provides concrete guidance to Equality Bodies on how they can use existing laws to protect against Al-enabled discrimination, and recommendations for their role in the implementation of future Al-specific regulation.
UNESCO	UNESCO's 'Information for All Programme' (IFAP) aims to address the challenges posed by global digital divides. Its primary focus areas are 'information for development' and information accessibility', around which it provides space for multi-stakeholder policy discussions on how to bridge key gaps in digital access – including from an accessibility and inclusivity perspective.

Civil society

Organisation	Focus of work
Al for Good Foundation	Al for Good brings together a broad network of interdisciplinary researchers, nonprofits, governments, and corporate actors to identify, prototype and scale technological solutions that measure and advance the UN's Sustainable Development Goals.
European	The EDF has two relevant projects
Disability Forum (EDF)	 Empowered by AI project is a capacity-building project founded by Google.org to ensure that people with disabilities in Europe develop AI literacy skills and empower them to use and work on AI safety in their work.
	2. Disability Inclusive AI project advocates for strong regulation in AI, and for the rights of people with disabilities in relation to the development and use of AI technologies; expanding the knowledge of the European disability rights movement; building the capacity of EDF members to make politicians, companies and the general public more aware of the need to include people with disabilities in the design and use of AI.
	 EDF collaborates with other digital and human rights organisations like <u>Edri</u> and <u>Equinet</u>, and have succeeded in making the <u>European Union's Al Act</u> more disability-friendly. Now that the Act has been passed, they are working on its implementation. EDF provides webinars and sub granting on Al and disability for organisations of persons with disabilities (OPD) members, and supports members to actively participate with their countries' preparations for implementing the Al Act.
Disability Rights Education and Defense Fund (DREDF)	DREDF has published research looking into <u>Addressing Disability and Ableist</u> <u>Bias in Autonomous Vehicles</u>





The Alan Turing Institute	Alan Turing Institute ran an <u>Al and Inclusion</u> research project from 2019-2020 focused on understanding the design and deployment of Al and inclusion to benefit those with disabilities.
Zero Project	The Zero project provides tools, solutions, and a global network of experts. They also manage an Equitable Al Knowledge Hub ; a free public resource designed to support advocates, developers, researchers, and practitioners working at the intersection of Al and disability inclusion.

Donors / Funders

Organisation	Focus of work
European Artificial Intelligence & Society Fund (EAISF)	 The EAISF supports civil society organisations to build their capacity for policy and advocacy on AI through funding, learning and collaboration. They share expertise with philanthropic partners to increase their understanding and engagement on these issues. Their focus areas include equity and anti-discrimination, They have utilised €7.5 million in funding since 2020 to support almost 40 organisations from around Europe to shape AI to better serve people and society, including the Build & Breakthrough Initiatives.
Foreign Commonwealth and Development Office	 FCDO is funding disability inclusive AI research and innovations. This workstream is currently being scoped (in 2025) and will likely include addressing bias, developing inclusive datasets, promoting technical skills, engaging with entrepreneurs offering AI solutions and supporting local advocacy networks. The AI4D programme is jointly funded by FCDO and Canada's International Development Research Centre (IDRC), with additional funding from Swedish SIDA and others to be announced. It aims to foster safe, inclusive and responsible AI ecosystems that empower people and accelerate progress on challenges in international development. First launched in 2020 as AI4D Africa, the second AI4D phase was launched in 2024 with a broadened scope across Africa and Asia. FCDO's EdTech Hub programme has recently launched their AI Observatory and Action Lab, an initiative designed to help education decision-makers in low-and middle-income countries (LMICs) harness the potential of artificial intelligence (AI) to improve learning outcomes, with a strong focus on equity and inclusion, including those learners with Special Educational Needs and Disabilities (SEND). The FCDO's AT2030 programme has funded the development of at least 10 AT innovations using AI, and is co-funding the Centre for Digital Language Inclusion led by the GDI Hub and Google.org, with match funding from Google.org. Elrha published a scoping analysis report in March 2025 on gaps and opportunities for innovation for humanitarian implementation agencies which highlighted gaps in areas such as access to services, meaningful participation, data use and intersectionality. AI is mentioned briefly in the report as one of several areas of innovation, mainly in relation to assistive technologies, but there was little mention or analysis of specific AI-driven solutions. Elrha is





currently exploring whether there may be opportunities to expand inclusive Al innovation through its future work, in light of significant investment requirements in technical capacity and data, and the evolving humanitarian funding landscape.

Research Institutions / Academia

Organisation	Focus of work
MIT Media Lab	The MIT Media Lab runs an AI-powered platform called Project Us that promotes inclusivity in the digital workplace. The platform helps users learn empathetic and inclusive communication practices through actionable, AI-driven feedback that increases self-awareness and promotes user-led experimentation. The platform uses AI and biosignal processing to provide real-time feedback about communication styles. This individualised feedback can help users develop their communications skills, and organisations make tangible progress towards building inclusive work environments.
Alliance For Inclusive Al at University of Berkeley	The Alliance fosters inclusion of underrepresented groups in analytics and artificial intelligence by developing ecosystems and communities to integrate learning.
Global Disability Innovation Hub (UCL)	 The GDI Hub is an academic research and practice centre driving disability innovation. The GDI Hub delivers projects across a portfolio of over £100m, and their flagship AT2030 programme is principally funded by FCDO. Their work includes research exploring the power of using AI to enhance the design of current and future assistive technologies. The Centre for Digital Language Inclusion (CDLI) is a project funded by FCDO's AT2030 programme with funding from Google.org, led by the GDI Hub in partnership with University College London and University of Ghana. The project is pioneering inclusive automated speech recognition (ASR) solutions for people with non-standard speech around the world. The project aims to address the fact that current speech recognition technologies often struggle to accurately interpret non-standard speech and limiting their effectiveness, by training AI models to better understand these speech patterns in local languages. The initial focus is on collecting datasets of non-standard speech for 10 African languages, from which the CDLI will build ASR models, develop AI-driven inclusive communication technologies and train others in the use of this innovative technology.
University of Washington - Centre for Research and Education on Accessible Technologies and Experiences (CREATE)	 The Centre was awarded a five-year, \$4.6 million grant to advance crucial research on AI and generative artificial intelligence (GAI). Research and development projects will explore questions about recent developments in AI and GAI: What risks do they pose for people with disabilities? And what opportunities might they offer for improving accessibility? CREATE will be leading a Rehabilitation Engineering Research Center (RERC) on participatory, assistive, inclusive, and responsible use of AI technology, funded by the National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR).





 The CREATE-RERC research projects investigate bias, privacy, and security risks when GAI is used in assistive technology contexts and for accessibility, and they explore possibilities for addressing these risks. The development projects of the CREATE-RERC seek to place people with disabilities as full participants in the design of responsible AI and GAI.

4. Recommendations

Find opportunities to build a detailed understanding of how Al tools are currently being used in countries in the Global South, including by people with disabilities or from other marginalised communities. This should include a focus on people's attitudes towards and willingness to engage with Al.

Recognise the limitations and risks associated with adopting current AI tools in the Global South, both in terms of access to such technologies and the fact that such tools are overwhelmingly based on data from able-bodied people in the Global North. Uncritical adoption or promotion of AI tools in many Global South contexts risks perpetuating the exclusion of people with disabilities (and other marginalised groups) and widening the Global North-South divide.

Invest in, and continue to build the evidence base around, low- and no-bandwidth Al tools, and how these can be used to supplement resourcing gaps within key sectors and as assistive technologies.

Promote (through programme design, influencing, and funding) the meaningful inclusion of people with disabilities in the design, end-user testing, and monitoring of the use of Al tools. Take opportunities to identify and share learning from good practice examples of where this is already happening.

Consider use of gen-Al tools as complementary aids within education programming (but not a substitute for traditional teaching methods), focusing on tools that require low-bandwidth and that can be used (or adapted for use) in a way that is accessible and disability-inclusive.

Ensure discussions and initiatives focused on the use of Al within humanitarian settings – including programming and gathering/use of data – are disability-inclusive from the outset.

Government and private sector actors in the Global North should draw on existing guidance on how to effectively and meaningfully partner with countries and organisations in the Global South in the development of a global AI ecosystem, ensuring all such processes are disability inclusive from the outset.

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Development Inclusive Futures Programme. Helpdesk reports are based on between 3 and 4.5 days of desk-based research per query and are designed to provide a brief overview of the key issues and expert thinking on issues around disability inclusion. Where referring to documented evidence, Helpdesk teams will seek to understand the methodologies used to generate evidence and will summarise this in Helpdesk outputs, noting any concerns with the robustness of the evidence being presented. For some Helpdesk services, in particular the practical know-how queries, the emphasis will be focused far less on academic validity of evidence and more on the validity of first-hand experience among disabled people and practitioners delivering and monitoring programmes on the ground. All sources will be clearly referenced.

Helpdesk services are provided by a consortium of leading organisations and individual experts on disability, including Social Development Direct, Sightsavers, ADD International, Light for the World, Humanity & Inclusion, BRAC, BBC Media Action, Sense and the Institute of Development Studies (IDS). Expert advice may be sought from this Group, as well as from the wider academic and practitioner community, and those able to provide input within the short time-frame are acknowledged. Any views or opinions expressed do not necessarily reflect those of FCDO, the Disability Inclusion Helpdesk or any of the contributing organisations/experts.

For any further request or enquiry, contact enquiries@disabilityinclusion.org.uk

Suggested citation:

Harrison, A. and Horsfield, N. (2025), Initial. (2022) *The Role and Use of Artificial Intelligence (AI) in Disability Inclusion*, Disability Inclusion Helpdesk Research Report No. X. London, UK: Disability Inclusion Helpdesk.