EPR Briefing
Ethical use of AI in Services for Persons with Disabilities

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As the development and deployment of Artificial Intelligence (AI) rapidly increase, the ethical implications of these technologies are being questioned and analysed by experts given the far-reaching impact on livelihoods of European citizens. Within this context, social services need to be supported by the EU and national governments to harness the power of AI tools; these can play an essential role in increasing autonomy and improving quality of life of service users, such as persons with disabilities.

Introduction

This Briefing aims to complement EPR's previous work on AI which was encapsulated in the Briefing titled "*Artificial intelligence and service provision for people with disabilities*" published in 2022. It also draws on the discussions and conclusions from the EPR 2024 Annual Conference "*AI and New Technologies for Inclusion: Leaving no one behind in the digital transition*". This conference was co-organised by Fundación ONCE and with the collaboration of our Spanish members – Fundación INTRAS, Fundación Rey Ardid and AURA Fundació. The conference focused on the opportunities and risks of embracing AI and new technologies to deliver services to people with disabilities in the present and future.

By looking into the legal and policy frameworks at European level, and delving into ethical considerations of AI applicability and use by service providers, the Briefing will assess how the technological revolution can be used at the benefit of inclusion and as a tool for more innovative services. In addition, the Briefing will provide recommendations for policymakers and social services on how to ethically leverage the power of AI-driven solutions to enhance the quality of service provision for persons with disabilities.

European Policy and Legal Framework on AI

In 2018 the European Commission (EC) adopted a Communication to promote the development of AI in Europe, and in 2019 it published a Coordinated Plan on AI – endorsed by the Council of the European Union – to coordinate the EU Member States' national AI strategies. Building on this groundwork, in April 2019 the EC published a set of non-binding Ethics guidelines for trustworthy AI. Prepared by the EC High-Level Expert Group on AI (HLEG), composed of 52 independent experts, this document aims to offer recommendations and guidance on how to foster and secure the development of ethical AI systems in the EU. The core principle of the EU guidelines is that the EU must develop a **'human-centric' approach** to trustworthy AI that is respectful of European values and principles.

The negotiations for the AI Act took two-three years after the 2021 review of the aforementioned Coordinated Plan. This is part of the EU's eagerness to harness the many opportunities and address challenges brought about by AI in a **future-proof manner**. The Act was designed to be broad and horizontal, with **cross-cutting application**, to avoid the need for multiple sectoral regulations for AI.

The AI Act adopts a **risk-based approach** to regulating AI systems, differentiating between AI tools that generate:

- i) **low or no risk:** AI systems with minimal impact on people's rights that do not require special regulation
- ii) **medium or low risk** (General Purpose AI): AI systems used for a wide range of tasks and presenting fewer risks but still subject to transparency requirements.
- iii) **high risk**: AI systems that are permitted but strictly regulated because they can significantly influence a person's life chances (e.g., decisions on employment, access to loans, or educational admission).
- iv) **unacceptable risk:** AI systems deemed too dangerous or incompatible with European values and therefore banned entirely.

Commendably, the AI Act explicitly mentions some specific risks that are heightened for people with disability, linked notably to biometric identification algorithms used in employment contexts (e.g., in recruitment, promotion, firing, task assignment, and monitoring).
The **higher the risk** to cause harm to society or to imperil fundamental rights, **the stricter the rules**. This is established also considering both the pre- and post-monitoring of AI systems throughout their lifecycle.
High-risk AI systems are specifically listed in Annex III of the Act, and subdivided into various areas, such as education and training, which are particularly relevant to social services and the care sector. If external expert bodies (notified bodies) are required for evaluation, the product is deemed high risk. The AI Act also requires that high-risk AI systems must be **accessible** to everyone, including persons with disabilities. Finally, the Act **prohibits AI systems that pose an unacceptable risk to citizens,** such as those which can manipulate human behaviour, exploit people's vulnerabilities, or cause physical or psychological harm.

The European Commission will launch an interpretative guidance to explain the AI Act and its applications. For the enforcement the common rules across the EU, a new dedicated EU AI Office and a scientific panel of independent experts have also been set up.

After entry into force, the AI Act will apply with the following timeframe:

- 6 months for prohibited AI systems;
- 12 months for general-purpose AI (GPAI);
- 24 months for high risk AI systems under **Annex III**;
- 36 months for high risk AI systems under **Annex II**.

It is important to recognize that the AI Act is one component of the broader EU policy on AI. It intersects with other regulations such as the GDPR, the Data Governance Act, fundamental rights frameworks, the European Health Database proposal, and other digital strategies. Looking ahead, further legislation is anticipated, including the AI Liability Directive, which will address accountability for damages caused by AI. For these laws to be effective, it is essential that they are widely understood, enforced, and supported by penalties for non-compliance.

The AI legislation is built on the premise of fostering trustworthy AI, with safeguards designed according to the risks AI poses to the public. Yet, **the question remains whether these risks are different or greater for persons with disabilities compared to the general population. This is a critical consideration as AI systems continue to evolve.**

Some argue that excessive regulation could stifle innovation. This presents a regulatory dilemma: how can we create a framework that balances the need for innovation with the necessity of protecting fundamental rights? In the long run, global-level regulation might be needed to address this challenge comprehensively. However, whereas Europe's AI regulations aim to protect citizens, differing norms in other regions like China and the United States may lead to global inconsistencies. Thus, international cooperation on AI ethics is urgently needed. Yet, there is also concern that stringent regulations could stifle creativity, particularly in public research.

GENERATIVE AI

While AI itself is not new, its rapid democratization, especially following the advent of ChatGPT, has emphasized the need for continuous and dynamic ethical considerations. This is known as the "pacing problem," whereby legislation lags behind technological developments. AI should progress at the speed of trust without restricting innovation, and entrepreneurs and creators need to be educated on inclusive AI. Researchers should focus on creating technology that uses mindful language and respects vulnerable groups. Ethical guidelines must be continuously adapted to keep pace with technological advancements, ensuring that AI systems and algorithms benefit everyone equitably. In social services, often generative AI can be used to brainstorm care and support plans or to organise users' records. Because of the sensitivity of such data it is crucial to also develop an ethically and human rights driven organisational policy on the use of these new technologies.

AI and Ethics: Opportunities and Challenges

"Whether AI can advance the interests of service users and communities depends on a collective effort to design and implement ethically defensible laws and policies and ethically designed AI technologies. There are also potential serious negative consequences if ethical principles and human rights obligations are not prioritized by those who fund, design, regulate or use AI technologies" (WHO, 2021)

AI has the potential to be a powerful tool for inclusion, but only if it is used ethically. In fact, **AI can impact the rights of people with disabilities as set out in the CRPD**. Given that the European Union and its Member states are legally bound to respect this Convention, as they move forward with its implementation, they must remain aware of the risks brough about by the AI revolution. Thus, a proactive approach to ethics and AI is necessary to ensure that emerging technologies respect fundamental rights. The following EU guiding principles offer a solid starting point for this, for any stakeholder when developing, deploying, implementing or using AI systems. They are:

1. Human agency and oversight;
2. Technical robustness and safety;
3. Privacy and data governance;
4. Transparency;
5. Diversity, non-discrimination, and fairness;
6. Societal and environmental well-being;
7. Accountability.

For the scope of this paper, it is relevant to note that the more general EU Guidelines can be complemented by the six core principles for ethical AI regulation and governance identified by the World Health Organisation (WHO) in 2021:

1) protecting autonomy;
2) promoting human well-being, human safety, and the public interest;
3) ensuring transparency, explainability and intelligibility;
4) fostering reproducibility and accountability;
5) ensuring inclusivity and equity;
6) promoting AI that is responsive and sustainable.

These are a culmination of 18 months of consultation with experts in ethics, digital technologies, law and human rights, alongside representatives of national health ministries. With such principles in mind, AI can strengthen social services to the benefit of public health and wellbeing.

Discrimination

Countries must prevent discrimination when AI tools and products are developed and used, encourage private companies to ensure accessibility for everyone, and protect the privacy of people with disabilities. Effective use of public procurement also plays a significant role in this context. When public money is used to purchase assistive technologies and equipment, it must be accessible; likewise public investments should not be channelled in AI systems that cause discrimination. Several legal

frameworks already exist to ensure equality and non-discrimination for people with disabilities.

The aforementioned WHO Guidance defines the "*digital divide*" as the unequal distribution of access to, use of or effect of information and communication technologies among different groups. Therefore, policy frameworks must consider the affordability and accessibility of AI systems, to mitigate risks of accelerating social inequalities. AI, as a technology hinging upon statistical reasoning and machine learning, tends to favour the typical and predictable. As a result, it can propagate discrimination against those who are *statistically different* and not within the 'average' distribution clusters, found at the outliers of data sets. This is often the case for people with disabilities, as extensively researched by Jutta Treviranus in her work as Director of the Inclusive Design Research Centre. Thus, the current imperative is to create AI systems and algorithms that value human uniqueness, rather than amplify existing biases.

Although is inevitable that human biases are imbedded in AI solutions, greater awareness is needed to identify the consequences and impacts this yields for different segments of the population and end users. The diversity within the disability community makes it more challenging to ensure their representativeness in data sets. Inequitable use of AI arises when user interfaces are designed without considering the needs of persons with disabilities, leading to exclusionary systems.

Moreover, privacy risks are inherent in any AI solution using personal data, and persons with disabilities are often more recognizable. Privacy concerns are longstanding, particularly regarding surveillance cameras used for older persons with disabilities. AI adds another layer of complexity, with the potential for recognition, reaction, or even triggering interventions. Risks to privacy are heightened for people with disability, who may be more easily identifiable because of their uniqueness, and AI tools might exclude people with disability by design if user interfaces are inaccessible to them. It is a challenge to maintain high-security standards without compromising accessibility.

Disability-Inclusive AI

A frequently cited barrier to the adoption of disability-inclusive AI is the **lack of involvement of persons with disabilities and users in the development of AI-based solutions**. As shown by a 2023 OECD report, this results in the development of AI solutions that may be irrelevant (because they do not meet real needs) and impractical (if the solutions are not connected to existing policies, actors and support systems). Moreover, as argued in an 2023 interview by experts Kave Noori and Marine Uldry from the European Disability Forum, when people with disabilities, in all their diversities, are not considered in the development of AI systems, AI can become another barrier for their full inclusion in society. On the contrary, AI can help provide more personalised services for persons with specific needs if leveraged to promote the human-centred nature of social services. **Technology can help persons lead a more independent life when aligned with the objectives of autonomy and quality of life.**

Employment & Service Provision

In the context of employment, AI is classified as a high-risk system. The recent OECD report, "*Using Artificial Intelligence (AI) to support people with disabilities in the labour market*," explores both the challenges and opportunities in depth. For one, automation presents the most disruption for jobs, raising concerns about the future of workers whose roles are 'replaceable'. The COVID-19 pandemic accelerated digital transformation in businesses, further altering workplaces. Despite digitalisation and automation, as extensive research by McKinsey Global Institute highlights, the importance of people skills is evermore central to add value beyond what can be done by automated systems and intelligent machines, no matter what sector. Some foundational competencies are: **creativity, collaboration, critical thinking, and communication**. Behavioural skills, such as flexibility, adaptability, and resilience, will also remain crucial in the coming years to operate and adapt in a continuously developing digital environment. Ultimately, AI will not replace

humans in the workplace; rather, humans working with AI will replace those who do not.

Although there may not be a shortage of jobs, the nature of work will change, and society must prepare for this transformation. Importantly, technology should not be implemented without consulting those affected. When employees/staff are excluded from these decisions, it can lead to backlash. Service providers should assess whether AI should be actually used in the organisation, especially when resources are limited. There might be risks of over-expectations about AI and overestimation of the benefits that adoption of AI will bring to the organisations. Sometimes, the benefits of AI may not justify these extra costs and could divert resources from measures that are more needed. Yet, in service provision, AI can significantly reduce administrative burden and improve time management. At organisational level, AI can enhance data management and health record platforms to save time in retrieving information about patients, or assisting with scheduling appointments and organising workflows.

Assistive Technologies

Finally, AI can be considered among the new technologies (together with sensors, robotics, brain-computer interface) that can support a faster evolution of the field of Assistive Technologies (AT), although it is not an assistive technology in itself. AI can be a component of a software or a digital app which is an assistive device. Assistive technologies include a wide variety of equipment and tools which can be very “traditional” and not related to AI (wheelchairs, contact lenses, prostheses, equipment to maintain posture etc.), while others are more digital (software for communication, interaction, vision.) and can be further powered by AI. However, ATs can enhance the autonomy of persons with disabilities also without AI, so service providers will need a forward-looking outcome-oriented approach guided by decisive leadership in their decisions regarding adoption of AI tools.

Recommendations

Against this backdrop, taking stock from EPR AC experts and the research done by EPR Secretariat, EPR has elaborated the following recommendations together with input from the EPR members of the Digital Skills Working Groups addressed to both policy makers and service providers.

TO POLICYMAKERS

1. Data collection and monitoring

Inclusive design should be foundational in the development of any AI solutions to prevent discrimination and ensure equitable access for persons with disabilities. Key actions include:

- **Data Quality and Representation**: Ensure that AI models are trained on data that accurately represents persons with disabilities, their experiences, needs and choices.
- **Bias Prevention and mitigation**: Use metrics that prevent statistical discrimination and enhance AI models’ fairness, representativeness and inclusivity. Recognising that not all biases can be prevented, in those cases measures must be in place in order to identify them timely and mitigate them.
- **Transparency and Human Oversight:** Implement sound transparency measures in data handling and prioritize human oversight to protect user privacy and traceability. Ensure that AI systems align with GDPR and other European data protection standards. These practices will reduce risks of fraud and discriminatory impact on most vulnerable groups.

2. Ethical use of AI

Policymakers should promote the ethical development and deployment of AI by:

- **Funding Research & Development**: Increase public funding for research and development in affordable AI solutions that enhance accessibility, making these innovations more readily available. Introduce and follow through on

requirements for accessibility testing and direct involvement of persons with disabilities in the development process of new AI systems.

- **Encouraging Responsible Innovation**: Require AI developers to adhere to ethical guidelines that align with accessibility goals, helping create AI systems that advance equal opportunities. Apply the principles enclosed in the European Commission 2019 Ethics Guidelines for Trustworthy AI published.

3. Awareness-raising of Affordable AI

Effective and equitable use of AI requires that users are aware of and trained in available tools. Suggested measures include:

- **New Flagship Initiatives under the European Disability Strategy**: Incorporate flagship initiatives in the upcoming five years of the European Disability Strategy 2021–2030 that are related to AI and in particular its use in Assistive Technologies. The EU should spotlight accessibility, affordability and provide Guidance on how to implement ethical technological solutions in across all sectors.
- **Commitment to Bridge the Digital Divide**: Support initiatives that reduce digital disparities within societal groups, ensuring that AI systems and tools are affordable so to benefit all service users equally, without widening existing inequalities. Invest in capacity building programmes such as national training programmes, updated university or VET courses, upskilling and reskilling of staff in public services.
- **Awareness Raising Campaigns**: Launch initiatives to inform people with disabilities, caregivers, service provider staff, and employers about existing assistive technologies that can foster independent living and autonomy. Promote a collective understanding of the negative impacts of excluding persons with disabilities from AI advances, fostering an inclusive mindset that encourages the positive potential of AI.

4. National implementation of AI Act

National policies should uphold human rights and encourage collaboration to mitigate potential AI biases. Key recommendations include:

- **Human Rights-Based AI**: Ensure that AI systems respect and promote the rights of persons with disabilities as part of national AI Act implementation.
- **Cross-Sectoral Collaboration**: Foster public-private partnerships between legislators, technology firms, and advocacy groups to address and prevent biases in AI systems.
- **Educational Integration**: Integrate AI into educational curricula to equip future generations with the skills to create, use and deploy inclusive technologies.
- **Monitoring mechanism** to keep track of and assess the process of implementation and its impact.

5. Adopt measures to retain talent in the EU

This is needed for effective growth of AI ecosystems, innovation and competitiveness. Brain drain of AI experts is a concerning issue across Europe, felt especially by companies but also by research centres.

6. Assess the environmental impact of the use of AI models and systems

Growing evidence demonstrates that AI models require high consumption of energy and resources (such as water) to function; in some countries or regions this could exacerbate existing inequalities, with negative consequences on vulnerable groups, thus environmental monitoring must be an essential component of a holistic approach when developing AI solutions.

TO SERVICE PROVIDERS

7. Invest in Digital Skills and Training of Staff on new AI tools

Digital literacy is essential for maximizing AI's potential in social services. Recommended actions include:

- **Incorporate Digital Skills in Vocational Training**: Integrate digital skills, capacity building and AI training into vocational education, traineeships, apprenticeships, and internships.
- **Leverage Existing Models**: Adapt current AI solutions to meet diverse needs, which can be more resource-efficient than creating new systems from scratch.

8. Implement Person-centred disability-inclusive AI-solutions

Services to people with disabilities and social services should prioritize co-design with end-users to build trust and ensure successful adoption of new AI tools and systems by:

- **Co-creation with Persons with Disabilities**: Actively engage persons with disabilities in in the testing and feedback stages of AI legislation and technology implementation. Co-design AI solutions to ensure they are relevant, usable and e-inclusive for all.
- **Purpose-Driven, Safe AI Use**: Develop AI implementation strategies tailored to the needs of social services, ensuring these solutions are practical and improve organisational efficiency. When considering the introduction of AI, it's important to assess its potential impact, including the extra costs of procurement, training, technology & infrastructure investment needed to adequately introduce the AI tool. The impact assessment should be continuous after the adoption of AI in order to ensure safety and proper use.
- Capacity building in Data Protection: Build awareness of service users in digital literacy, so they can understand risks of using AI tools. Likewise, update staff on AI-related legal obligations to ensure responsible use of systems in line privacy with regulations.
- Offer Accessible Training Programs: Develop comprehensive training programs in easy-to-understand language to empower service users to use technology safely.
- Promote the use of Assistive Technologies that benefit from AI and other innovative technologies. Foster a culture of innovation within the organisation to increase the availability and uptake of assistive technologies that can enhance the autonomy and quality of life of service users.
- Foster responsibility and accountability, for example through collection of feedback from workers and end users about the use of AI tools in the organisation. Given the sensitivity of user data, implement robust privacy protections to prevent exploitation and enhance safety for service users.
- Leverage EU networks like EPR to keep influencing the implementation of the AI Act and future policy initiatives. In particular, the AI Act foresees the development of codes of conduct for low-risk AI systems, which can address topics like accessibility, AI literacy and the impact of AI on vulnerable groups. Civil society organisations and representative organisations are among the stakeholders that can contribute to these codes of conduct, and European networks are important to bring together the voices of service providers from the national level up to EU institutions.
- Engage with the wider health and care ecosystem (such as universities, industry, regulators) as many companies developing AI tools often lack the knowledge of the needs and characteristics of certain groups of users, for example people with disabilities. Service providers have the expertise that the industry needs to develop inclusive tools, so it is important that both actors interact, exchange practices and experiences, and learn from each other.

Conclusions and Future Considerations

In an increasingly technological world, it is essential that innovation goes hand in hand with inclusion. AI has the potential to be a powerful tool for inclusion and equity but only if it is used ethically and responsibly. AI has the potential to transform the rehabilitation landscape, creating personalized and effective solutions that meet the needs of each individual. However, it is also important to ensure responsible development and application of this technology, taking into account the ethical and social issues it entails. In order to achieve this, collaboration among service providers, end users, the private sector, policymakers, and regulators is necessary.

In accordance with the findings of the OECD Report 2023 that affirms that the issue of steering AI to seize its potential benefits in the realm of accessibility and disability rights has not yet been part of regulatory discussions, in the EU or elsewhere, EPR encourages the European Commission to include AI and its potential in the second phase of the European Strategy on the Rights of Persons with Disabilities and discuss it within the Disability Platform. Moreover, we call for services to people with disabilities, and social services at large, to be supported by the EU and national governments to harness the power of AI tools.

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