Ethical AI in Disability Services:
Insights from Stakeholders

Lara Bezzina
Independent Scholar, Malta
bezzinalara@gmail.com

Nina Ždanovič
Keio University, Japan
nina.zdanovic@keio.jp

Families in the age of Artificial Intelligence: Rights, Inclusion and Empowerment Conference
COFACE
17 March 2026
Athens, Greece

AI in Disability Services

expanding opportunities for autonomy, inclusion, and improved wellbeing for persons with disabilities

- Artificial Intelligence (AI) is increasingly used across sectors:
  - Business decision-making and automation
  - Smart healthcare systems
  - Personalised education environments

- AI is also transforming **disability services**, supporting:
  - **Independent living** through **smart home technologies** (e.g. virtual voice assistants)
  - **Educational support** tools (e.g. **social robots** engaging neurodivergent children; **speech-to-text tools** supporting learners with cognitive disabilities)

The Research

- 30 participants interviewed (Oct 2024 – Jul 2025), study commissioned by EASPD
- Stakeholders: service providers, advocacy/policy organisations, academics, AI / tech providers
- Participants mainly from EU Member States; some self-identified as persons with disabilities

Findings:
Social & Technical Inhibitors to using AI

Why is the Disability Services Sector reluctant to engage with AI?

- **General fear and mistrust of AI** among frontline staff
- **Low digital literacy** limits confidence and experimentation: lack of AI-skilled administrative staff
- Perception of staff as **"people-oriented" rather than "technology-oriented"**
- Fear of **job loss and deskilling** due to automation
- Influenced by **popular culture narratives** (AI takeover, hostility toward humans)

"The main limitation we see in the short term is that [disability service frontline staff] are so far behind [in] computer skills that they are not thinking about using AI."
(Disability services provider)

"Many [disability service frontline staff] are reluctant to use AI because they might fear it will replace them."
(Disability services provider)

Over-generalisation in care planning

- The tendency of AI systems to overgeneralise and lack contextual awareness poses a major challenge in care planning, discouraging providers from adopting these tools due to concerns about liability.
- Several disability service providers indicated that they often encountered biased or unreliable outputs, which could compromise the quality of services.

AI, Human Relationships & Accountability Risks

- AI chatbots and social robots are increasingly used to reduce isolation
- Risk of replacing — rather than supplementing — human relationships
- Emotional attachment to AI remains ethically ambiguous
- Serious accountability gaps in cases of harmful or inappropriate AI responses

"And so there's an ethical concern there. This is not a real person. <…> Are we cheapening the human experience? <…> Or is it, you know, is it good? Many people [come to] <…> the conclusion [that] if it's filling a void for a person and they're happy, and they like it, [then it's] good. Let them, right?"

(OPD representative)

Blurring the line between autonomy and privacy

- AI-enabled assistive technologies enhance autonomy but increase **surveillance risks**
- AI systems require large-scale data collection to function effectively
- Smart home systems collect extensive personal data, including during highly intimate activities
- Persons with disabilities often face an **"impossible choice"**: privacy vs independence

"AI is tracking [a service user] at home… so they're saying this person could eventually live independently. Yeah, but with AI watching him all the time."
(Disability services provider)

Data security & surveillance risks

- Sensitive health and personal data stored in opaque AI systems
- Uncertainty around data storage, access, and third-party involvement

"Do we know where that information's going? … Why is it any of Google's business?"
(Disability foundation / technology provider / person with disability)

So we can have, for example, an AI system that is observing people with disabilities <…> to see if they have an accident, let's say, if they have a crisis that needs immediate attention. There's nobody there, so where do we draw the line of personal space [and] personal information? If you have, let's say <…> a person that needs constant observation by [a] caretaker and you give this job to an AI system. <…> His personal life is observed now for medical reasons.
(Disability services provider)

Representation of Disability in AI

AI optimised for majority patterns → minority exclusion

"Disability is a small number, and machine learning is looking for patterns in the majority of data."
(Person with disability / technology provider)

Speech & communication exclusion

- Poor recognition of disability-specific accents
- Limited accommodation of non-verbal or image-based communication

"[Speech-to-text] is marketed as useful… but a lot of my friends… have a special hard-of-hearing accent… and the system is very bad at recognising how they speak."
(OPD representative)

"There are literacy issues… people may not be able to type, may not be able to read… that's not how [they] communicate."
(Technology provider / person with disability)

Compliance over inclusion

- Accessibility reduced to checklist adherence (e.g., World Wide Web Consortium's Web Accessibility Initiative guidelines)
- Aesthetic priorities override usability

It's like the graphic designer wants to make things look pretty. And I said, well, that might be pretty, but the contrast isn't strong enough. It's not gonna work. You know, or there's not enough white space, or the buttons, that you know they'll miss the button here. It needs to be big and he's like, it's uglier. So I don't care. It needs to work.

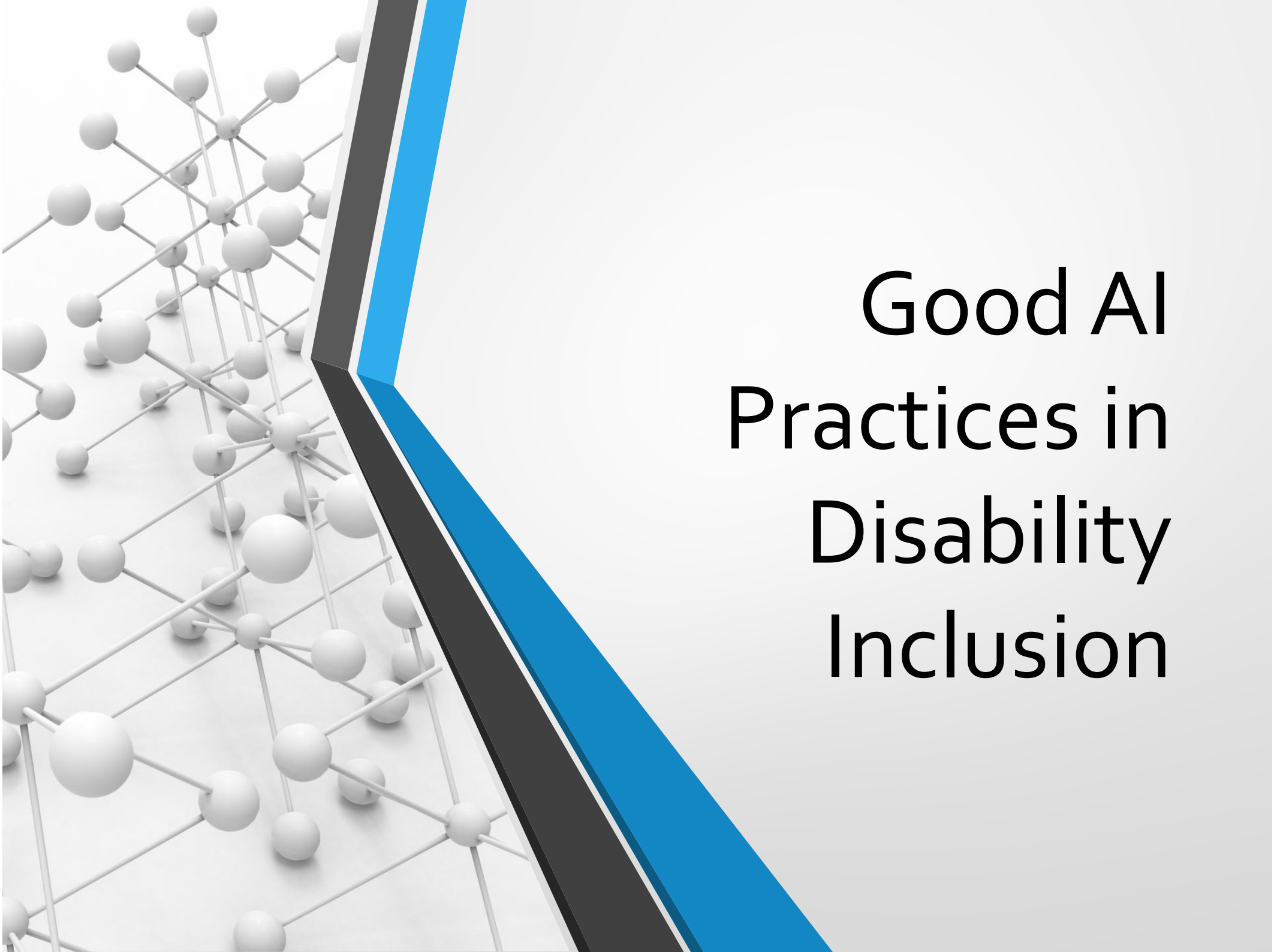
(Disability services provider)

Reinforcing digital marginalisation

- Mainstream platforms (e.g., YouTube, Netflix, Spotify) underperform for disability-specific communication forms
- Reduced usage → reduced representation in training data → continued exclusion

Unfortunately, a lot of the people [who] are doing the design fall prey to ableism, because, well, there are more people without cognitive and physical impairments.

(Technology provider / person with disability)



Good AI Practices in Disability Inclusion

Disability Awareness Among AI Developers

- Situating ethics in relatable, real-world scenarios (e.g. encouraging engineering students to reflect on whether they would find it acceptable for an AI system to generate biased outputs based on physical appearance, personality traits, or other personal attributes)
- Institutionalising support (within tech companies) for inclusive co-design
- Engaging directly with people with lived disability experience
- Experiential collaboration with the disability sector

Disability Inclusion through Participatory Design

Practical Implementation

- Involve end-users throughout planning & design
- Pilot tools within disability service organisations
- Secure buy-in from at least one internal champion

Co-Design with Persons with Disabilities

Participatory Engagement as a Cornerstone

- Direct involvement of:
  - Persons with disabilities
  - Disability service providers

Effective Methods

- Iterative workshops (not one-off consultations)
- Continuous feedback loops
- Structured collaboration across development stages