

Perceptions of Artificial Intelligence in the Memory Clinic: Patients and Care Partners Opinions in the PROMINENT evaluation study

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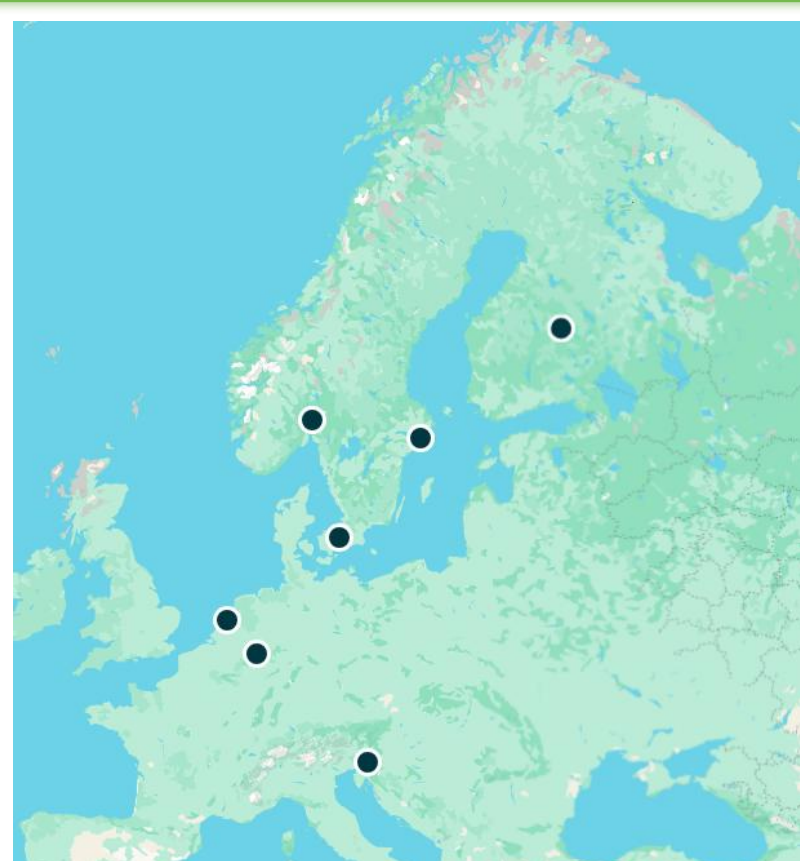
BACKGROUND

- Patients' opinion on use of AI in general healthcare is **heterogeneous** and varies by demographic factors and technical affinity.
- Little is known about attitudes towards AI-based digital tools in the context of **neurodegenerative diseases**.
- European Innovative Health Initiative-funded project **PROMINENT** focuses on improving dementia diagnosis through AI in ongoing project from 2023 until 2028.

AIM

To survey patients and care partners about their experience with digital tools and opinions on using AI to support clinicians in interpreting complex diagnostic data in the memory clinic.

METHODS



- Recruitment at seven European memory clinics (*see map*)
- 175 memory clinic patients and 175 care partners
- Asked to participate after diagnostic workup.

- Survey consisting of 40 questions, either open ended, multiple choice or according to Likert scale.
- Based on "Survey on the use of Artificial Intelligence in Healthcare" (Fritsch et al., 2022), adapted to assess demographics, technical affinity, and attitudes toward AI-assisted tools.
- Prefaced with a scenario of how AI could be used in memory clinics, specifically.
- Examine patient and care partner perspectives for differences
 - in digital affinity
 - in perceptions of AI-assisted tools in dementia diagnostics
 - based on demographics and country

RESULTS

- N=136 patients
Mean age=68.7 [48-86], 47.8% female
- N=122 care partners
Mean age=63.2 [27-86], 65.6% female.
- Robust AI knowledge was more common among care partners (50.0%) than patients (36.0%).
- Across groups, technical affinity was negatively correlated with age ($r(258)=-0.31$, $p<.001$) but not associated with gender ($p=.245$).
- More positive views on using AI in healthcare were linked to higher technical affinity ($r(258)=0.42$, $p<.001$).
- Most patients (73.6%) and care partners (78.5%) agreed they would want their memory clinic doctors to be supported by AI.
- Similarly, 77.2% of patients and 92.6% of care partners believed AI could benefit memory clinic patients.
- Patients and care partners did not differ in their general opinion on the use of AI in healthcare ($p=.191$) (*detailed overview, see Figure 1*).

Taken all together: How positive or negative do you feel about the use of Artificial Intelligence in medicine?

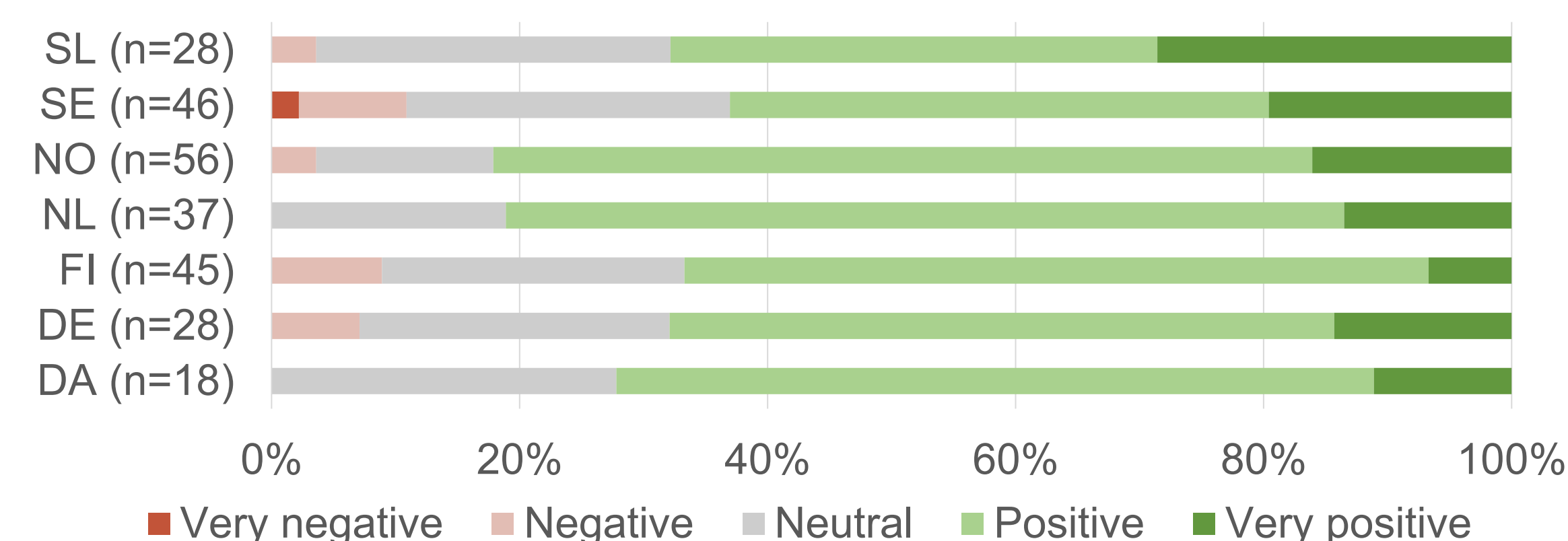


Figure 1: General opinion towards the use of AI in healthcare

RESULTS

- Among the most frequently voiced concerns across groups were
 - external manipulation (58.1%),
 - reduced trust in doctors (36.4%) and
 - doctors relying too heavily on AI (32.2%) (*detailed overview, see Figure 2*).

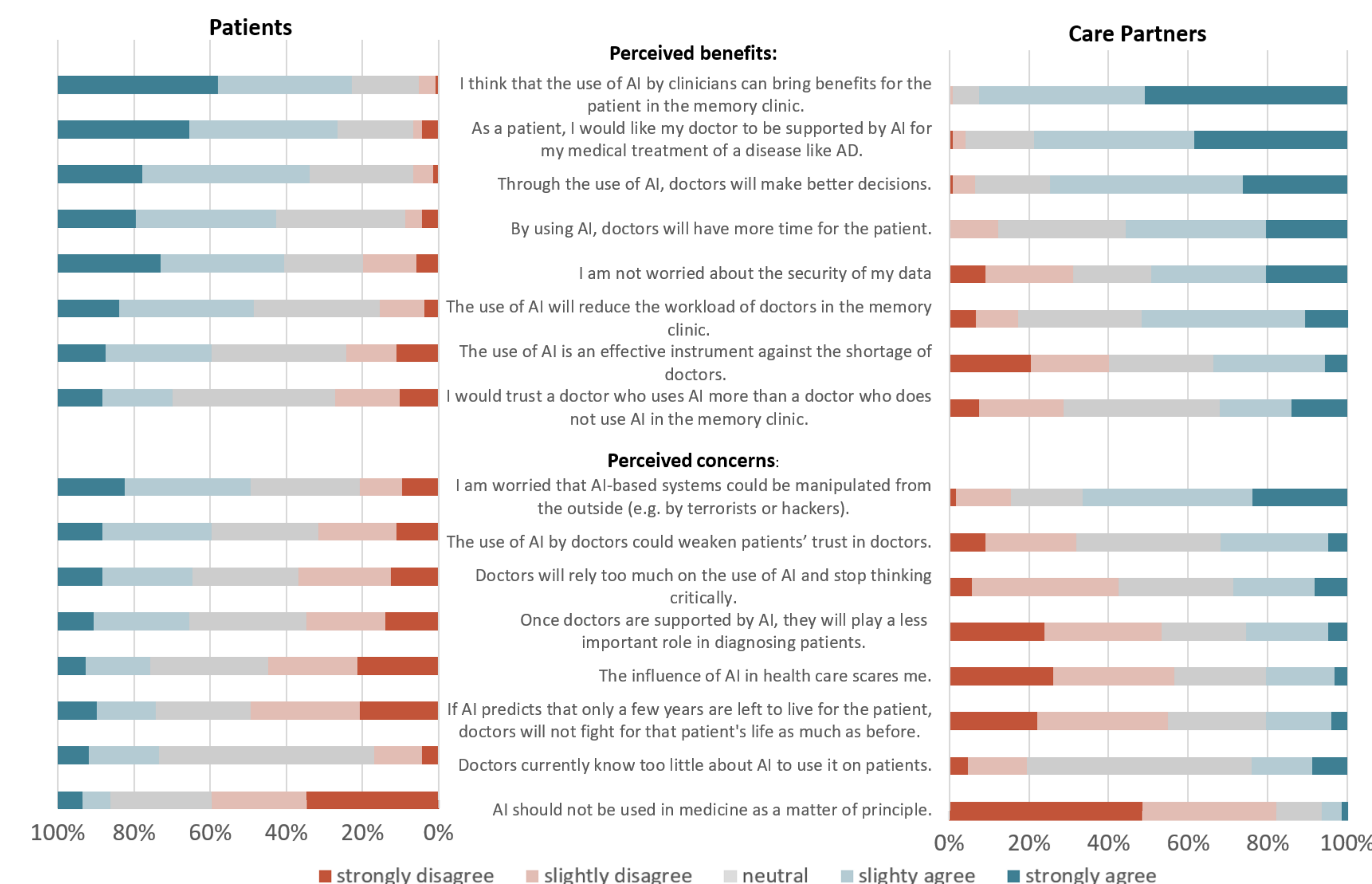


Figure 2: perceived benefits and concerns for patients and care partners

CONCLUSION

AI-assisted digital tools may support clinicians in the complex diagnostic process and management of neurodegenerative disorders.

Understanding patient and care partner perspectives towards the use of AI in memory clinics is crucial to address concerns and pave the way for successful implementation.