PCR103

Erasmus School of Health Policy & Management

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smart hospital care pathway engine

Patients and neurologists' preferences for remote patient monitoring and artificial intelligence to improve Parkinson's disease management.

Authors: *Godoy Junior C[1]*, Miele F[2], Mäkitie L[3], Bakker LJ[1], Fiorenzato E[2], Uyl-de Groot C[1], Redekop K[1], van Deen WK[1]*
1.Erasmus School of Health Policy and Management, Rotterdam, Netherlands
2.University of Padova, Padova, Italy
3. University of Helsinki, Helsinki, Finland

Rationale

- Effective advanced therapies to manage advanced Parkinson's disease (PD) have become available.
- Timely and correct identification of the candidates for advanced therapies remains a challenge.
- Remote monitoring combined with AI algorithms can assist neurologists in this task.
- Limited evidence exists on patients and physicians' preferences for these novel technologies.

Aim

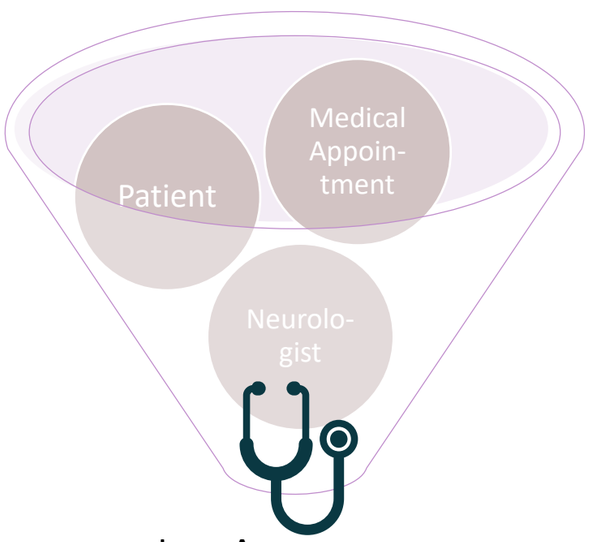
- Explore the perspectives of patients and neurologists on the use of AI and remote monitoring for detection of advanced PD.

Methods

- Interviews with patients (N=5) and neurologists (N=6), and 6 focus groups with patients (n=21) in Finland and Italy.
- Topics: disease progression detection, disease monitoring and perceptions about an AI and remote monitoring.

Results

Figure 1: Frustrations with current monitoring techniques



Low Awareness

- Symptoms
- Daily functioning
- Side effects

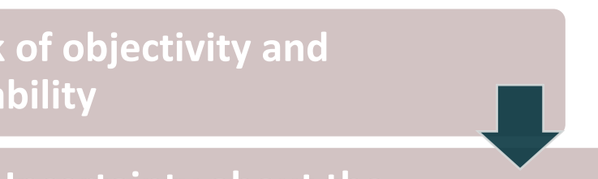
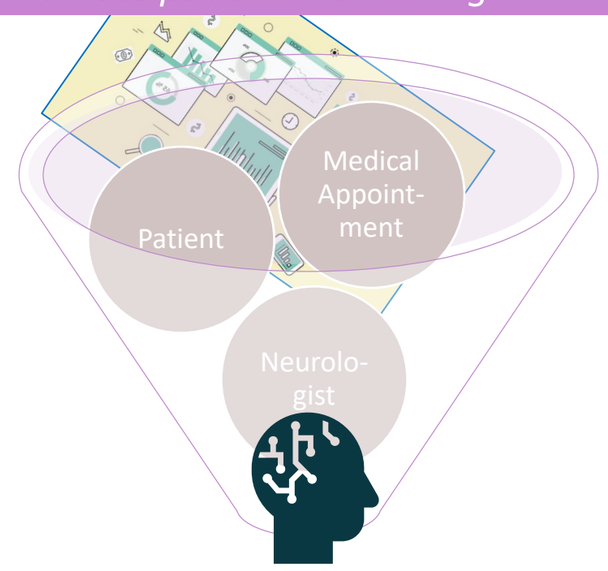


Figure 2: Expectations about a future with AI and remote patient monitoring



High Awareness

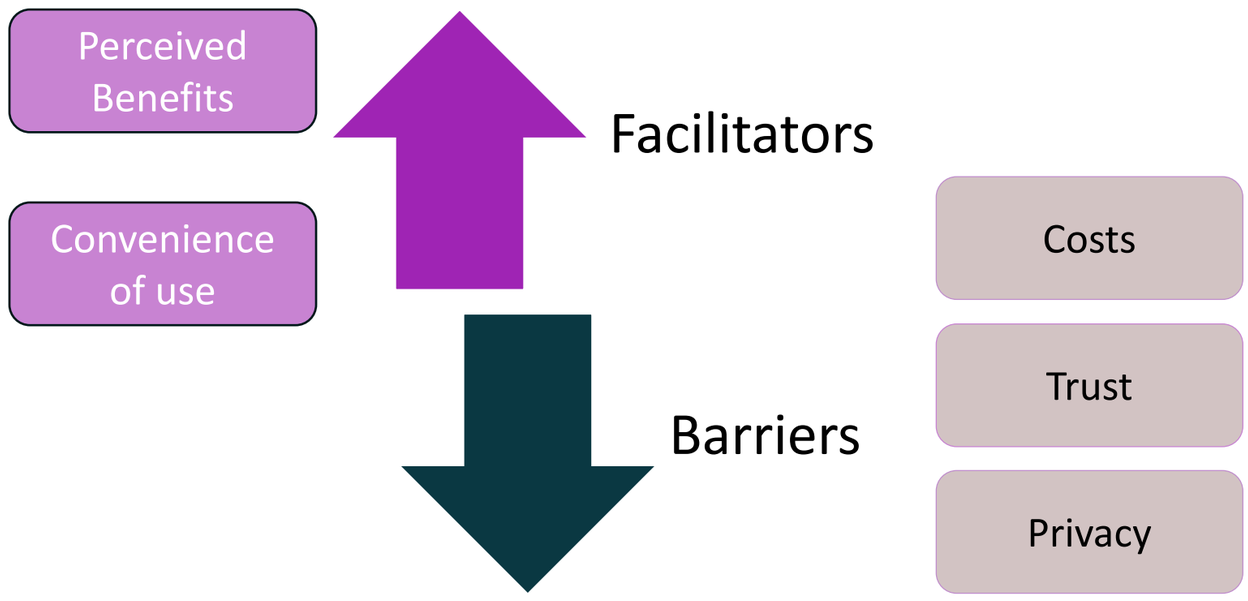
- Symptoms
- Daily functioning
- Side effects

Results

Figure 3: Barriers and facilitators for AI enhanced remote patient monitoring in Parkinson's disease

"If I'm reliably told that it is a method that could give excellent results in terms of knowledge for the treating doctor, for ourselves, I'd wear it in my ears as well."

"Data should be simple, so it wouldn't take me a long time to evaluate it."



"I've been doing it (remote monitoring), , and honestly it really did not do any good except to get me 400-500 Euros for two visits or three."

"Hopefully all the software is designed in such a that no mistakes are made."

"If the camera is limited to you, who can control it, yes. If my wife can be involved, then it bothers me."

Conclusion

Parkinson's patients and neurologists want to increase their ability to monitor disease progression in a timely fashion, amplifying their control over the condition. Remote monitoring and AI are welcomed for this purpose.

Patients acknowledge trade-offs between potential benefits and undesirable aspects of AI-enhanced remote monitoring. The potential benefits in controlling symptoms or disease progression seem to outweigh most of the inconveniences brought by the technology.

Data from this study will be used to design a discrete choice experiment to assess the trade-offs quantitatively.

Erasmus University Rotterdam
Make it happen.

Carlos Godoy Jr.
godoyjunior@eshpm.eur.nl

HUS Helsinki University Hospital

800 1222-2022 ANNI — Università degli Studi di Padova