



# Harnessing novel data sources for next-generation observational health studies

«DSI meets USZ»

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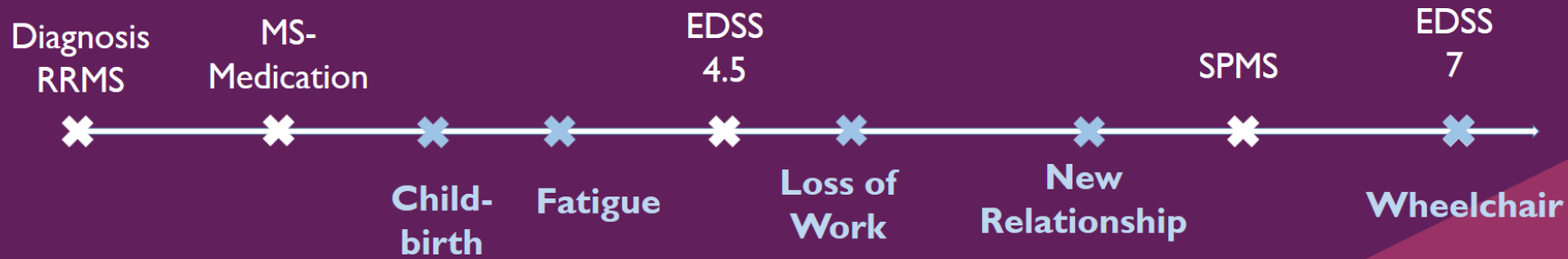




## Participatory science – engaging patients and citizens in research



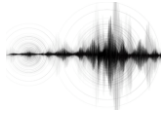
Which were the most important events in your life with MS?



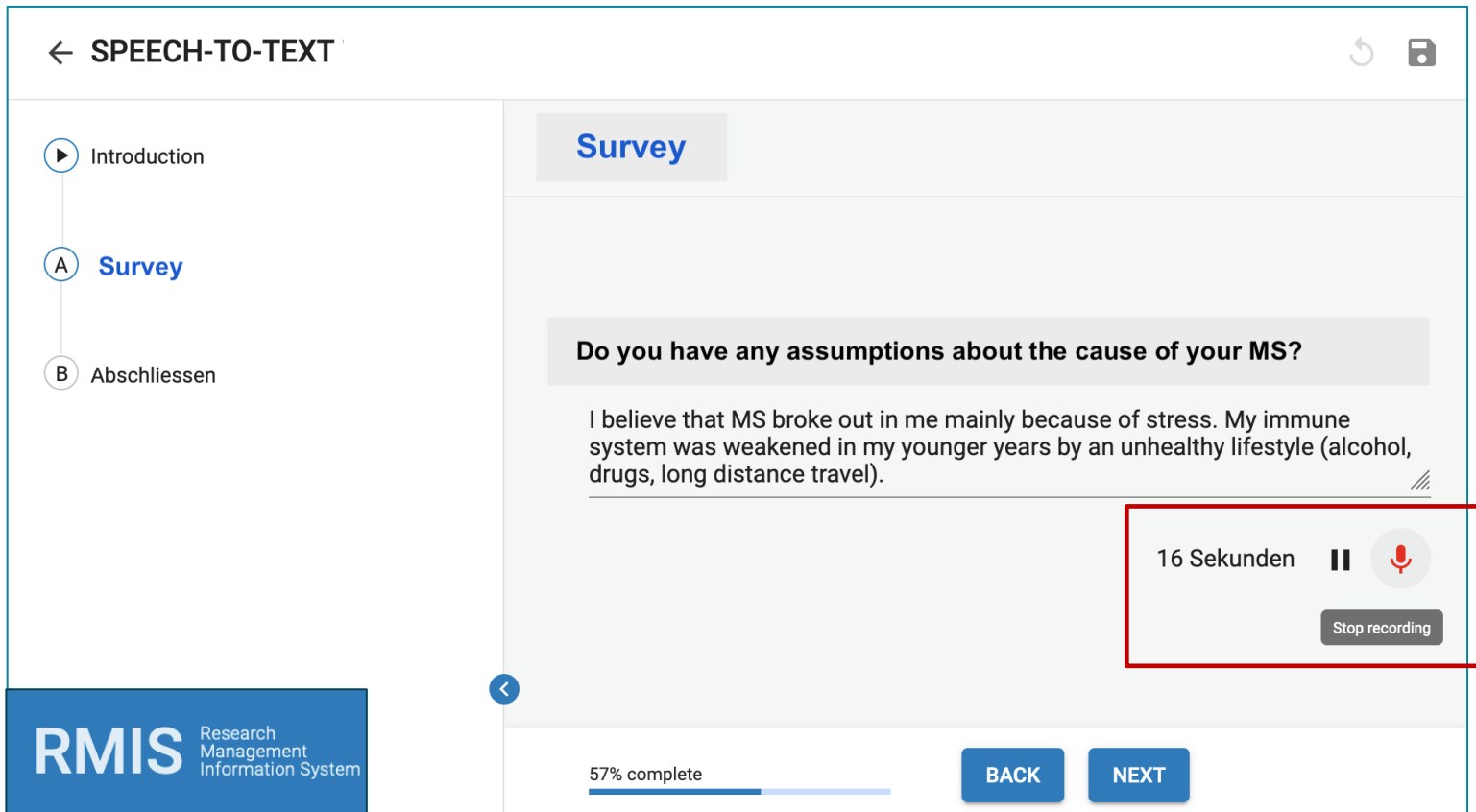
NLP Analysis based on free-text descriptions of 1'039 participants of the Swiss MS Registry.

### Keywords

Citizen Health Science  
Lived experiences  
Mixed methods  
Describing disease histories



# Talk2UZH “Talk to us” – combining surveys with speech and voice analysis



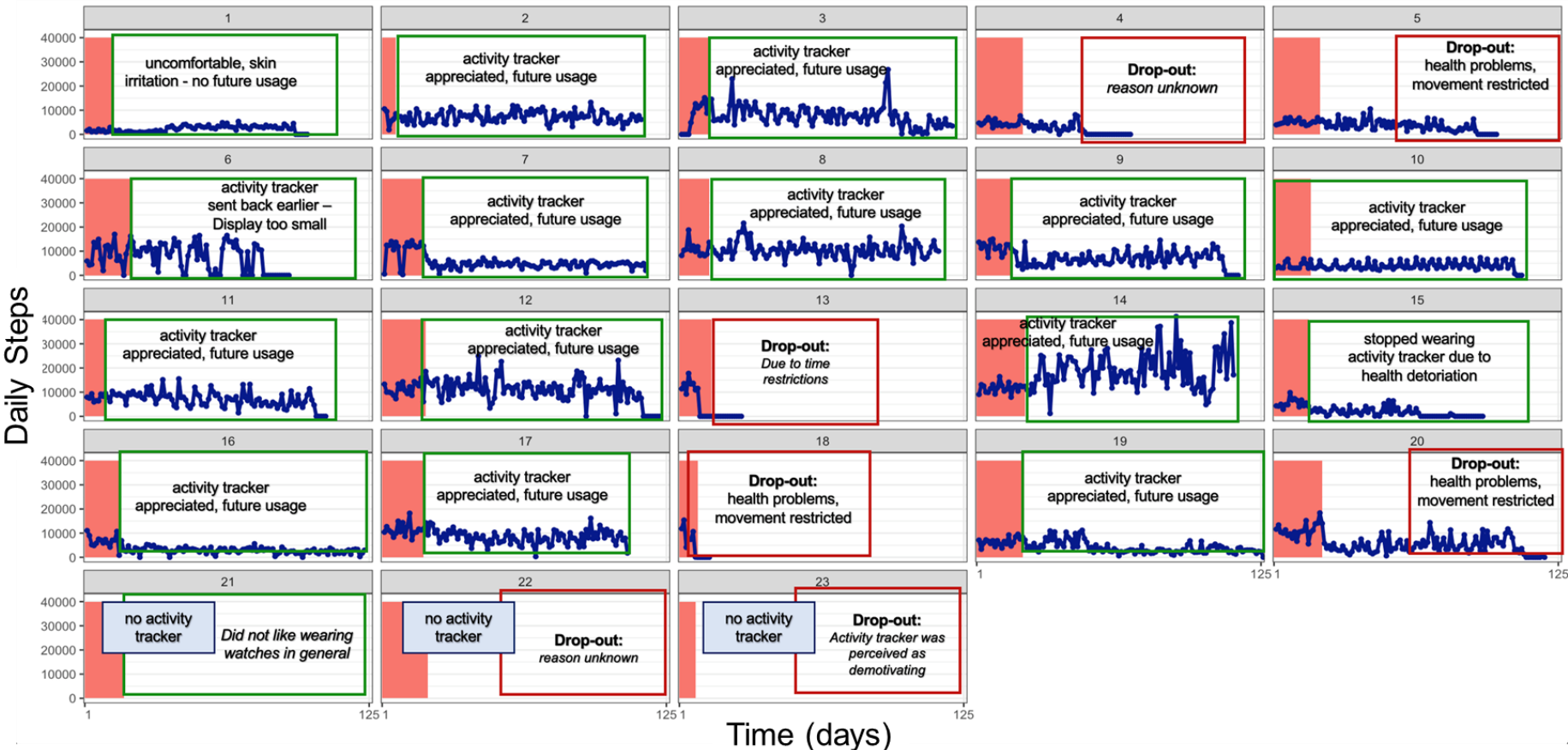
The screenshot shows a mobile application interface titled "SPEECH-TO-TEXT". On the left, a navigation menu lists three steps: "Introduction", "Survey" (highlighted with a blue circle and 'A'), and "Abschliessen" (highlighted with a blue circle and 'B'). The main content area is titled "Survey" and contains a question: "Do you have any assumptions about the cause of your MS?". Below the question, a text input field contains the response: "I believe that MS broke out in me mainly because of stress. My immune system was weakened in my younger years by an unhealthy lifestyle (alcohol, drugs, long distance travel)". At the bottom right of the text input, there is a recording control panel with a timer showing "16 Sekunden", a pause button, a microphone icon, and a "Stop recording" button. At the bottom of the screen, there is a progress bar showing "57% complete" and two buttons labeled "BACK" and "NEXT". In the bottom left corner, there is a blue box with the text "RMIS Research Management Information System".

## Keywords

Speech-to-text transcription  
Multilingual, UZH-hosted  
Longitudinal research platform  
Mixed methods studies



# Wearable sensors for routine chronic disease care - benefits, challenges, and success factors?



**Keywords**  
 Passive monitoring  
 Behavioural changes  
 Digital biomarkers  
 Implementation



=

**Next-generation Observational Research  
on Chronic Diseases and Health (NOR-CH)**

## Digital & Mobile Health Group – The 3 Research Pillars

### Digital Research Studies



Develop and validate **new technologies** for routine **chronic disease** care and research

### Digital Public Health



Overcome **technical and non-technical challenges** to improve Swiss **health data ecosystem**

### Methods of Digital Health



**UZH Digital Society Initiative**

Create **methodological guidance** for working with novel digital data and for conducting **remote research**



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Zurich<sup>UZH</sup>

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# Thank you for your attention!

Access to speech-  
to-text platform  
(test version of  
Talk2UZH)

