



Investigating the interaction between documentation quality and an artificial intelligence (AI) system for delirium prediction in a hospital setting. Lili M. Schöler^{1,3}, Michael Simon², Laura-Maria Peltonen³ ¹Medical Center – University of Freiburg, Germany; ²University of Basel, Switzerland; ³University of Turku, Finland

Delirium is featured by [1]:

Disturbance in attention and change in either
Cognition or consciousness
Develo
Visualized

Project KIDELIR (Medical Center – University of Freiburg):

- Develops a delirium-predicting AI system
- Visualized in the electronic health record
- Fluctuation over the course of the day
- Resulting from an underlying medical condition

Delirium-predicting **AI systems**:

- Search for patterns in routine data
- The predictive power is generally high [2]

Quality of data used to train AI (ground truth) is crucial but... **Delirium** often goes **unrecognized**, **underreported** and symptoms are **not well documented** [1,3,4].

Recognition

Delirium



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The **overall aim** of this doctoral research is to understand the role that the quality of delirium documentation plays in the performance of a delirium-predicting AI system and how the implementation of this system influences the quality of delirium recognition and documentation in a hospital setting.

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