

INTERPOLAR

INTERPOLAR | INTERventional POLypharmacy – drug interActions – Risks

REDUCING MEDICATION PROBLEMS AND IMPROVING MEDICATION SAFETY

Older people, in particular, often take multiple medications at the same time. This can lead to medication-related problems, such as drug interactions and side effects. The consequences can be additional diseases and the need for therapy. In the INTERPOLAR project, the four medical informatics consortia DIFUTURE, HiGHmed, MIRACUM and SMITH are working together on IT solutions to improve medication safety.

INTERPOLAR builds on the predecessor project POLAR. POLAR developed and applied methods to collect personal medication data from routine care and pharmacies. INTERPOLAR is now using the findings from POLAR for application in clinical practice.

IDENTIFYING RISKY MEDICATION AND INTERVENING APPROPRIATELY

For the first time, a standardized cross-site routine documentation of medication analyses and medication-related problems are established. This will make it possible to harmonize previously heterogeneous documentation practices across hospitals and enable cross-site analyses. The analyses are based on an expert-developed list of clinically relevant contraindications for commonly prescribed medications. Using IT-supported methods, potential medication-related problems can thus be identified in routine data. Hospital pharmacists then retrospectively assess these cases and evaluate their clinical relevance. At the same time, their decision-making process is documented in a structured manner. This makes it possible to examine in which situations IT-supported analyses can meaningfully inform the decision-making of ward pharmacists.

In total, data from around 70,000 inpatient treatment cases will be analyzed. The results are expected to help further develop algorithms—for example for artificial intelligence methods—and improve medication safety.

To conduct his project, INTERPOLAR is using the IT infrastructure established as part of the Medical Informatics Initiative (MII) and is coordinated by the SMITH Consortium office.



GOALS

- Identify and evaluate potential clinically relevant medication issues in routine data.
- Demonstrate that IT support can reduce medication-related problems.
- Deploy hospital pharmacists in a targeted and resource-efficient manner.
- Investigate cause-and-effect relationships of medication-related problems using care data.
- Test the infrastructure established in the Medical Informatics Initiative and demonstrate its added value for clinical practice.

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Project Partners

CONSORTIUM MANAGEMENT

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- Leipzig University, SMITH Office

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- Ludwig Maximilian University Munich – Hospital

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- Witten/Herdecke University

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