Additional File 1. Flow diagram of the study

Develop ideas for the main research question on physician barriers and facilitators to implementing digital innovations

Step 1: Initial literature search (theoretical framework)

- Identifying relevant interdisciplinary theoretical approaches through literature search, e.g.:
- Consolidated Framework of Implementation Research (CFIR)
- Technology Acceptance Model Approach (TAM)
- Organization-related theoretical approaches
- Development of theory-based guidelines for interviews and focus groups

Step 4: Synthesize evidence

- Primary data collection: survey with primary care physicians (n=218)
- Data analysis: verification of the psychometric properties of the measurement analysis
- Mediation analysis through Structural equation modeling (SEM)
- Building a refined middle-range theory about complex implementation mechanisms (CMO)

Step 2: Primary data collection (qualitative)

- Qualitative data collection of interviews and focus groups with primary care physicians (n=27)
- Data analysis: deductive-inductive content analysis
- Overview of the range of physicians' opinions in our study

Step 3: Organize and transform data

- Realist inquiry approach: describing a context-mechanism-outcomeconfiguration (CMO) based on primary qualitative data
- Application of belief elicitation approach to contextualize behaviorrelated variables and identify dimensions relevant to patient care from the physicians' perspective
- Operationalization of a latent construct of contextualized innovation effectiveness beliefs with three subdimensions