Universität Basel

Publication

Re-focusing explainability in medicine

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Using artificial intelligence to improve patient care is a cutting-edge methodology, but its implementation in clinical routine has been limited due to significant concerns about understanding its behavior. One major barrier is the explainability dilemma and how much explanation is required to use artificial intelligence safely in healthcare. A key issue is the lack of consensus on the definition of explainability by experts, regulators, and healthcare professionals, resulting in a wide variety of terminology and expectations. This paper aims to fill the gap by defining minimal explainability standards to serve the views and needs of essential stakeholders in healthcare. In that sense, we propose to define minimal explainability criteria that can support doctors'understanding, meet patients'needs, and fulfill legal requirements. Therefore, explainability need not to be exhaustive but sufficient for doctors and patients to comprehend the artificial intelligence models'clinical implications and be integrated safely into clinical practice. Thus, minimally acceptable standards for explainability are context-dependent and should respond to the specific need and potential risks of each clinical scenario for a responsible and ethical implementation of artificial intelligence.