
UCSF's IMPACC: Revolutionising AI Monitoring for Enhanced Healthcare



The [UCSF Division of Clinical Informatics and Digital Transformation \(DoC-IT\) and UCSF Health](#) received a \$5 million donation from Ken and Kathy Hao to develop the Impact Monitoring Platform for AI in Clinical Care (IMPACC). This platform aims to provide a continuous, real-time, and automated evaluation of AI technologies used in clinical settings, addressing a critical gap in the ongoing assessment of these tools' efficacy, safety, and equity.

Donation Fuels Development of AI Monitoring in Clinical Care

IMPACC will be led by Julia Adler-Milstein, PhD, chief of DoC-IT, and Sara Murray, MD, MAS, chief health AI officer at UCSF Health. Their leadership underscores the collaboration between clinical informatics and healthcare AI at UCSF. Adler-Milstein highlighted the transformative nature of the gift, noting that it comes at a crucial time as AI becomes more integrated into healthcare. The platform aims to enhance patient care at UCSF and advance the scientific understanding of AI tool assessments in real-world scenarios.

IMPACC Ensures Continuous Safety and Efficacy

The current healthcare system lacks established protocols for continuous AI monitoring, leading to potential undetected adverse outcomes. While pre-deployment assessments ensure AI tools are safe to use, ongoing monitoring post-deployment is necessary to promptly identify and address issues. IMPACC will address this need by transitioning from periodic, manual checks to a system of continuous, automated, and longitudinal monitoring across a wide range of measures. This system will have criteria for escalation to human review and intervention when necessary.

Sara Murray emphasised that IMPACC would significantly improve how AI performance is analysed in healthcare. The platform will provide direct, actionable insights into AI tools' ongoing performance, ensuring their effectiveness and safety. It will monitor whether AI tools achieve intended clinical outcomes, inform decisions on scaling, refining, or discontinuing tools, and flag any potential dangers or risks of worsening health disparities.

IMPACC Pilot at UCSF Health: Pioneering AI Monitoring for Enhanced Patient Care

After its development and testing, IMPACC will be piloted at UCSF Health with an initial set of current AI tools. This pilot will be conducted in collaboration with the UCSF Health AI Oversight Committee, which evaluates the safety and efficacy of AI tools and recommends broader deployment across the health system. The team will also consider creating a dashboard to allow patients to track AI usage in their care.

Implementing IMPACC requires diverse expertise, including technical development and social and behavioural sciences, making the collaboration between DoC-IT and UCSF Health well-suited for this innovative project. The Haos' philanthropic support is crucial in enabling UCSF to pursue this vital research and its practical applications in healthcare.

About the UCSF Division of Clinical Informatics and Digital Transformation (DoC-IT)

DoC-IT is a newly established division at UCSF that serves as the academic hub for applied clinical informatics researchers within the UCSF Department of Medicine. It houses the Center for Clinical Informatics and Improvement Research (CLIIR), the nation's only research centre focused on using metadata to assess the real-world application and impact of digital tools. CLIIR is nationally recognised for its expertise in measuring user interactions with electronic health records (EHR), tracking data views, user actions, and the behavioural changes prompted by AI tool integration.

About UCSF Health

UCSF Health is globally recognised for its highly specialised and innovative medical care and is part of UCSF, a leading institution in health sciences research and education. UCSF Health brings together top experts in virtually every medical field to drive forward treatment and technological advancements that benefit patients worldwide. The UCSF Health AI team has developed an AI governance process and built the HIPAC platform, which supports and integrates AI models with the UCSF Health EHR system.

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