

Future expert work in the age of "black box", data-intensive, and algorithmically augmented healthcare

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Working closely with healthcare practitioners, we: (1) study interactions between experts, patients and cognition-augmenting technologies; and (2) develop new technologies and workflows to make work responsive and empowering.

What: Remote gait assessment tools for healthcare work of practitioners who treat Multiple Sclerosis (MS) patients.

How: Using data from wearable sensors, we investigate clinically-contextualized user interface design to support clinicians' longitudinal understanding of patients' progression over time.

More details: Seals et al, Proc. CHI 2022

What: A machine learning (ML) model to support hospital pharmacists in prioritizing medication order review.

How: Using ML models trained on EHR data, we developed a clinically-contextualized review prioritization alert tool based on provider data.

More details: Balestra et al, *JAMIA Open* 2021

What: Identify requirements for remote 'physician assistant' model for Orientation & Mobility (O&M) instruction and assessment

How: Using cell phones and low-cost sensors, we investigate clinically-contextualized design to support O&M specialists in new forms of remote practice.





