

Transcription of Media Clips with Dr. Jonathan Handler, senior fellow for Innovation, OSF HealthCare

Predictive models can overpromise and under-deliver

"The fundamental concept that the correctness of the prediction always correlates with how much benefit it created for the users is not accurate." (:13)

Models can create distracting alerts

"If I'm busy doing CPR on a patient, I don't need the predictive model to fire in a loud alarm that distracts me from that work telling me the patient may be in trouble, right? The system is correct, but it is not providing benefit. In fact, it's actually probably creating harm by distracting me from my work." (:22)

New metrics (novel statistics) can create better models

"So we created a new form of statistics called utility based statistics that takes sensitivity, specificity, positive and negative predictive values. And it's a very intuitive way of doing it but at the end of the day, it's a fundamentally different and more relevant way of assessing models so that when we, when we say this is how the model is going to perform, that is much more much more closely mirrors what the clinicians will actually experience so we can make better decisions about it. So a key limitation is that the models over promise and under deliver, and one of the ways we addressed it was fine. We will create a new mechanism for doing those statistics and we think it's a much better way of doing things." (:41)