

# Algorithmic Decision-making in the US Healthcare Industry

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**Abstract.** In this research in progress we present the initial stage of a large ethnographic study at a healthcare network in the US. Our goal is to understand how healthcare organizations in the US use algorithms to improve efficiency (cost saving) and effectiveness (quality) of healthcare. Our preliminary findings illustrate that at the national level, algorithms might be detrimental to healthcare quality because they do not consider (and differentiate) contextual issues such as social and cultural (local) settings. At the practice (hospital/physician) level, they help managing the tradeoff between following national “best practices” and accommodating needs of special patients or particular situations, because hospital-based algorithms can be over-ridden by clinicians. We conclude that, while more data needs to be collected, a responsible use of algorithms requires their constant supervision and their application with respect to specific social and cultural settings.

**Keywords:** algorithmic decision-making; US healthcare; Accountable Care Organizations