

Fixing Misallocation with Guidelines: Awareness vs. Adherence

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Abstract:

Expert decision-makers often deviate from evidence-based guidelines. If experts lack awareness of guidelines, dissemination may improve outcomes. If experts who are aware of guidelines continue to deviate, promoting stricter adherence has ambiguous effects on outcomes, depending on whether experts use information not encoded in guidelines. We study the role of guidelines in physician decisions to prescribe anticoagulants for atrial fibrillation patients. Anticoagulation reduces stroke risk but increases hemorrhage risk. By text-mining physician notes for guideline mentions, we identify when each physician becomes aware of a new guideline. Once aware of the guideline, physicians pivot their practice patterns to align more closely with the recommendations, but guideline adherence remains far from perfect. To evaluate whether continued non-adherence reflects physicians' superior information, we combine observational data on treatment choices with new machine learning estimates of heterogeneous treatment effects from eight randomized controlled trials. When physicians depart from guidelines, they are not responding to measurable treatment effect heterogeneity. Improving adherence to the current guideline produces much larger gains than making all physicians aware of the guideline. Our estimates imply that adherence to an optimal rule would prevent 47% more strokes without increasing hemorrhages.