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From the Editor: 2024 Clemen-Kleinmuntz Decision Analysis Best Paper Award

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In this issue, we present the 2024 Clemen–Kleinmuntz *Decision Analysis* Best Paper Award. The authors of the best papers will share a $2,000 prize. This prize is supported by an endowment established by the Kleinmuntz Family Foundation and administered by INFORMS. The goal of the Best Paper Award is to draw attention to the high quality of work published in the journal and encourage the journal's continuing growth and success.

All papers published during 2024 in the journal were assessed against three main criteria: the paper is foundationally based on decision analysis; the paper makes an important contribution to theory and/or practice; and the paper is broadly interesting and influential to a wide portion of the decision analysis community. I wish to thank Ali Abbas (University of Southern California, committee chair), Emanuele Borgonovo (Bocconi University), and Gilberto Montibeller (University of Bristol) for their excellent work as members of the award committee.

I am pleased to announce two co-winners for 2024:

The first one is "Curbing the Opioid Crisis: Optimal Dynamic Policies for Preventive and Mitigating Interventions," by Sina Ansari, Shakiba Enayati, Raha Akhavan-Tabatabaei, and Julie M. Kapp (Ansari et al. 2024). Opioids reduce the intensity of pain signals and are commonly prescribed for pain management following an injury. Misuse of prescription opioids can cause dependency on the pill or lead to secondary addictions to heroin or other synthetic opioids (such as fentanyl). The U.S. Department of Health and Human Services declared a public health emergency in 2017 to tackle the nationwide opioid crisis. This state of emergency remains in effect to this day.

This paper provides practitioners with a tool to effectively address the opioid epidemic and enhance public health by deciding how to allocate their budgets to various levels of intervention. It centers on the strategic distribution of resources across diverse interventions aimed at preventing and mitigating the consequences of opioid use disorder and overdose occurrences. The paper proposes a decision aid based on expected-utility theory, which feeds into a Markov decision-process model to generate optimal policies based on the current state of the epidemic. A 10-year simulation of the epidemic's progression is used to assess the dynamic efficacy of the proposed decision tool. The findings recommend allocating a significant portion of the budget to prevention when the rate of opioid pill acquisition rises, resulting in an average reduction of 29% in total costs compared with the scenario without intervention.

The other paper recognized as a co-winner is "The Discount Rate for Investment Analysis Applying Expected Utility," by Manel Baucells and Samuel E. Bodily (Baucells and Bodily 2024). There is a long-standing intricate relationship at the intersection between finance and decision analysis on how to discount a stream of uncertain cash flows. On the one hand, the finance paradigm suggests risk neutrality, with an appropriate discount rate that captures both risk preferences and the time value of money. On the other hand, the decision-analysis paradigm recommends expressing risk aversion through expected utility. To reconcile the two approaches, Baucells and Bodily develop new theory breaking down the problem into three relevant questions, where the selection of the appropriate discount rate

plays a central role in the first two, and the third shows the coincidence of the new expected-utility present-value criterion with the traditional finance expected net-present-value, discount-rate recommendation. Baucells and Bodily propose two new methods and provide a series of propositions that answer these questions. They illustrate the methods with a simple illuminating example. This work continues the stream of decision-analysis research already undertaken by authors such as Abbas, Bell, Bickel, Brandao, Clemen, Dyer, Hazen, Howard, Nau, Smith, and many others.

The award committee also selected a finalist for 2024: "Partitioning the Expected Value of Countermeasures with an Application to Terrorism," by Richard S. John, Robin L. Dillon, William J. Burns, and Nicholas Scurich (John et al. 2024). The efficient use of resources for countermeasures against terrorist actions is critical to keeping communities safe and maximizing societal value. One major challenge in counter-terrorism decision analysis is to assess the benefits of such countermeasures in general, and of deterrence in particular. In this paper, the authors suggest an innovative framework to assess the expected value of countermeasures by partitioning it into three components: threat reduction; vulnerability reduction; and consequence mitigation. The benefit of a countermeasure is measured by the expected value of countermeasure implementation attributable to a specific countermeasure. The paper presents two applications of the partitioning methodology, using examples that examine countermeasures designed to protect commercial aircraft against man-portable air defense systems. The proposed framework suggests a useful approach for explicitly accounting separately for deterrence, vulnerability reduction, and consequence mitigation in benefit-cost analyses. It provides quantifiable insights into how countermeasures reduce terrorism risk, as well as risks caused by other malicious agents. Hence, the paper makes an important contribution to the literature on counter-terrorism decision analysis.

I would like to thank all the authors who published papers in *Decision Analysis* in 2023. All were considered for the award, and many were strong competitors. I encourage the *Decision Analysis* community to continue submitting high-quality manuscripts that can be strong contenders for the Clemen–Kleinmuntz *Decision Analysis* Best Paper Award in future years, and want to recognize the award-winning and finalist papers for highlighting the ability of decision analysts to generate important policy-relevant and theoretically important work.

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