



# Online Overbooking Strategies in Outpatient Specialty Clinics with No-Shows and Advance Cancellations

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Timely patient access to healthcare is an ongoing problem. Patient behavior, such as no-shows and cancellations, can lead to additional issues that heighten the problem. We develop strategies that a clinic can utilize to determine if and when to overbook patients, over a finite horizon, in an online scheduling environment. We incorporate clinic parameters, including indirect waiting, no-shows, and cancellations to inform the overbooking decisions. We find that the optimal overbooking strategies are a function of both no-shows and cancellations, and that a clinic can, under certain conditions, achieve a greater service reward by overbooking patients than it can by not utilizing overbooking. Our work is motivated, in part, by our observations of scheduling decision-making at a Veterans Health Administration (VHA) specialty clinic.

## Biography

Shannon L. Harris was born in Hialeah, FL and raised in Northern Virginia. She received her BS in Systems Engineering (2007) from George Mason University and her PhD (2016) in Business Analytics and Operations from the University of Pittsburgh, Katz Graduate School of Business. Her PhD thesis is entitled “Essays in Appointment Management”. In Fall 2016, she will start as an Assistant Professor in Management Science at The Ohio State University, Fisher College of Business. Her research interests include predictive analytics and scheduling in healthcare and sports analytics.