# Sergei Savin

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#### PROFESSIONAL EXPERIENCE

## The Wharton School, University of Pennsylvania

- Professor, 2022 present
- Associate Professor with Tenure, 2011 2022
- Associate Professor, 2009 present

#### **London Business School, London**

• Associate Professor with Tenure, 2008 – 2009

# Columbia University, Graduate School of Business, New York

- Associate Professor, 2004 2008
- Assistant Professor, 2001 2004

#### INSEAD, Fontainebleau, France

• Visiting Associate Professor, 2006

## Judge Business School, University of Cambridge, Cambridge, UK

• Denis Gilling Visiting Scholar, 2006

## IBM Corporation, Supply Chain Optimization Practice, Philadelphia

• Associate, 1996-1999

#### **EDUCATION**

Ph.D. in Operations and Information Management, the Wharton School, University of Pennsylvania, 2001; Ph.D. in Physics, University of Pennsylvania, 1996

## RESEARCH INTERESTS

- Capacity and Patient Flow Management in Health Care Operations
- Performance-Based Incentives in Health Care and Education
- Crowdfunding and Online Service Platforms
- Diffusion Models for New Products and Services

## PUBLICATIONS (Google Scholar Profile)

## **Published and Forthcoming**

- 1. Ho, T.-H., S. Savin, and C. Terwiesch. Managing Demand and Sales Dynamics in New Product Diffusion, *Management Science*, **48** (2002), 187-206.
- 2. Savin, S. and C. Terwiesch. Optimal Product Launch Times in a Duopoly: Balancing Lifecycle Revenues with Product Cost, *Operations Research*, **53** (2005), 26-47.
- 3. Terwiesch, C., S. Savin, and I.-H. Hann. Online Haggling at a Name-Your-Own-Price Retailer: Theory and Application, *Management Science*, **51** (2005), 339-351.
- 4. Savin, S., M. Cohen, N. Gans, and Z. Katalan. Capacity Management in Rental Businesses with Two Customer Bases, *Operations Research*, **53** (2005), 617-631.
- 5. Green, L., S. Savin, and B. Wang. Managing Patient Service in a Diagnostic Medical Facility, *Operations Research*, **54** (2006), 11-25.
- 6. Netessine, S., S. Savin, and W.-Q. Xiao. Dynamic Revenue Management through Cross-Selling in E-Commerce Retailing, *Operations Research*, **54** (2006), 893-913.
- 7. Gans, N., and S. Savin, Pricing and Capacity Rationing in Rentals with Uncertain Durations, *Management Science*, **53** (2007), 390-407.
- 8. Green, L., S. Savin, and M. Murray. Providing Timely Access to Care: What is the Right Patient Panel Size?, *Joint Commission Journal on Quality and Patient Safety*, **33** (2007), 211-218.
- 9. Marinelli, C., and S. Savin. Optimal Distributed Dynamic Advertising, *Journal of Optimization Theory and Applications*, **137** (2008), 569-591.
- 10. Green, L., and S. Savin. Reducing Delays for Medical Appointments: a Queueing Approach, *Operations Research*, **56** (2008), 1526-38.

- 11. Gozzi, F., C. Marinelli, and S. Savin. On Controlled Linear Diffusions with Delay in a Model of Optimal Advertising under Uncertainty with Memory Effects, *Journal of Optimization Theory and Applications*, **142** (2009), 291-321.
- 12. Besbes, O., and S. Savin. Going Bunkers: Joint Route Selection and Refueling Problem, *Manufacturing and Service Operations Management*, **11** (2009), 694-711
- 13. Celik, S., A. Muharremoglu, and S. Savin. Revenue Management with Costly Price Adjustments, *Operations Research*, **57** (2009), 1206-1219.
- 14. Jiang, H., S. Netessine, and S. Savin. Robust Newsvendor Competition Under Asymmetric Information, *Operations Research*, **59** (2011), 254-261.
- 15. Ho, T.-H., S. Savin, C. Terwiesch. Note: A Reply to "New Product Diffusion Decisions Under Supply Constraints," *Management Science*, 57 (2011), 1811-1812.
- 16. Powell, A., S. Savin, and N. Savva. Physician Workload and Hospital Reimbursement: Overworked Servers Generate Less Revenue per Patient, *Manufacturing and Service Operations Management*, **14** (2012), 512-528.
- 17. Jiang, H., J. Pang, and S. Savin. Performance-Based Contracting for Outpatient Medical Services, *Manufacturing and Service Operations Management*, **14** (2012), 654-668.
- 18. Green, L., S. Savin and Y. Lu. Primary Care Physician Shortages Could Be Eliminated Through Use of Teams, Non-Physicians, and Electronic Communication, *Health Affairs*, **32** (2013), vol. 1, 11-19.
- 19. Green, L., S. Savin, and N. Savva. "Nursevendor Problem": Personnel Staffing in the Presence of Endogenous Absenteeism," *Management Science*, **59** (2013), 2237-2256.
- 20. Pac, F., S. Savin and C. Velu. When to Adopt an Innovation: Nash Equilibria in a Competitive Diffusion Framework, *European Journal of Operations Research*, 271 (2018), vol. 3, 968-984.
- 21. Bretthauer, K. and S. Savin. Introduction to the Special Issue on Patient-Centric Healthcare Management in the Age of Analytics, *Production and Operations Management*, 27 (2018), Vol. 12, pp. 2101–2102.
- 22. Bavafa, H., C. Leys, L. Örmeci, and S. Savin. Managing Portfolio of Elective Surgical Procedures: A Multidimensional Inverse Newsvendor Problem, *Operations Research*, **67** (2019), 1543–1563.
- 23. Bavafa, H., S. Savin, and C. Terwiesch. Managing Patient Panels with Non-Physician Providers, *Production and Operations Management* (2019), Vol. 28 (6), pp. 1577-1593.

- 24. Jiang, H., Z. Pang and S. Savin. Performance Incentives and Competition in Healthcare Markets, *Production and Operations Management* (2020), Vol. 29 (5), pp. 1145-1164.
- 25. Bavafa, H., S. Savin, and C. Terwiesch. Customizing Primary Care Delivery Using E-Visits, *Production and Operations Management* (2021), Vol. 30 (11), pp. 4306-4327.
- 26. Bavafa, H., L. Örmeci, S. Savin, and V. Virudachalam. Surgical Case-Mix and Discharge Decisions: Does Within-Hospital Coordination Matter?, *Operations Research*, **70** (2022), 990-1007.
- 27. Green, L., S. Savin, G. Greenberg, S. Hines, D. Lake, M. Minear, and R. Murphy. The impact of telehealth on primary care physician patient panel sizes: A modeling study, *Journal of the American Board of Family Medicine*, **35** (2022), 1007–1014.
- 28. Zhang, J., S. Savin, S. Veeraraghavan. Revenue Management in Crowdfunding, *Manufacturing and Service Operations Management*, **25** (2023), 200-217.
- 29. He, J., S. Savin, J. Goh, and C.P. Teo. Off-Platform Threats in On-Demand Services, *Manufacturing and Service Operations Management*, **25** (2023), 775-791.
- 30. Lim, J. M., K. Moon, and S. Savin. Searching for the Best Yardstick: Cost of Quality Improvements in the U.S. Hospital Industry, forthcoming in *Management Science*.
  - Winner of 2021 MSOM Student Paper Competition (J. M. Lim)
- 31. Park, E., H. Ouyang, J. Wang, S. Savin, S.C. Leung, and T. Rainer. Patient Sensitivity to Emergency Department Waiting Time Announcements, forthcoming in *Manufacturing and Service Operations Management*.
  - Finalist of 2023 MSOM Practice-Based Research Competition
- 32. Virudachalam, S. Savin, and M. Steinberg. Too Much Information: When Does Additional Testing Benefit Schools?, *Management Science*, published online in "Articles in Advance," 1 Nov 2023, https://doi.org/10.1287/mnsc.2020.01547.
- 33. Taiwo, E.S., S. Savin, F.Y. Chen, K.S. Chin. Patient-Controlled use of Non-Physician Providers: Appointment Scheduling in Mixed-Provider Settings, *Production and Operations Management*, (2023) Vol. 32 (8), pp. 2656-2673.

#### **Submitted for Publication**

34. Taiwo, E.S., F.Y. Chen, K.S. Chin, and S. Savin. To Carve Out or Not: Managing the Routine and Same-day Appointments for Outpatient Clinics, resubmission is prepared for *Production and Operations Management*.

35. Jiang, H., Z. Pang, and S. Savin. Consolidation in Healthcare Markets: Can Performance Incentives Preserve Access to Care? Major revision prepared for *Production and Operations Management*.

## **Working Papers**

36. Savin, S., Y. Xu, and L. Zhu. Delivering Multi-Specialty Care via Online Telemedicine Platforms, https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=3479544.

## **BOOK CHAPTER**

"Managing Patient Appointments in Primary Care", in *Patient Flow: Reducing Delay in Healthcare Delivery*, Springer International Series in Operations Research and Management Science, edited by Randolph Hall, Springer, 2006.

## **MEDIA CITATIONS**

"An Open-Access Doctor's Office" by K. Miller, *BusinessWeek*, February 12, 2007, <a href="http://www.businessweek.com/smallbiz/content/feb2007/sb20070212\_182930.htm">http://www.businessweek.com/smallbiz/content/feb2007/sb20070212\_182930.htm</a>.

"Calculate Your Ideal Patient Load: How to Strike the Correct Balance" by L. Stevens, *American Medical Association News*, May 12, 2008, http://www.ama-assn.org/amednews/2008/05/12/bisa0512.htm.

"Doctor Shortage? What Doctor Shortage?" by Sarah Kliff, *The Washington Post*, January 15, 2013, <a href="http://www.washingtonpost.com/blogs/wonkblog/wp/2013/01/15/doctor-shortage-what-doctor-shortage/">http://www.washingtonpost.com/blogs/wonkblog/wp/2013/01/15/doctor-shortage/</a>

"Economists Outline Strategy To Counter Primary Care Shortage" by J. Lubell, *American Medical Association News*, January 18, 2013, <a href="http://www.ama-assn.org/amednews/2013/01/14/gvsd0118.htm">http://www.ama-assn.org/amednews/2013/01/14/gvsd0118.htm</a>

#### PROFESSIONAL ACTIVITIES AND AWARDS

- Departmental Editor, Healthcare Operations, *Production and Operations Management* (2009 present)
- Associate Editor, *Operations Research* (2006 present), *Management Science* (2009 present), *Manufacturing and Service Operations Management* (2006 present)
- Distinguished Department Editor Service Award, *Production and Operations Management* (2019)
- Meritorious Service Award, Manufacturing and Service Operations Management (2007, 2009, 2010, 2014), Management Science (2013, 2014), Operations Research (2013, 2014)

- Member, Organizing Committee, 1<sup>st</sup> Informs Healthcare Conference (2011)
- Judge, INFORMS Pierskalla Best Paper Award (2011, 2013-present)
- Chair, MSOM Special Interest Group on Healthcare Operations track, Informs 2011 Conference
- Senior Editor, *Production and Operations Management* (2004 2009)
- Member of the Proposal Review Panel, National Science Foundation, USA (2006, 2009), Engineering and Physical Sciences Research Council, United Kingdom (2006)
- Finalist, MSOM Society student paper competition (2001)
- Judge, MSOM Society student paper competition (2003 2008, 2010, 2011, 2013-present)
- Wharton Teaching Excellence Award (2010, 2020, 2021, 2023)
- Teaching Award "Goes Above and Beyond the Call of Duty", Wharton MBA program (2010, 2011)
- Class of 1984 Award, Wharton MBA program (2010)
- Finalist for the Helen Kardon Moss Anvil Award, Wharton MBA program (2010)
- PhD Student Advising:

Ben Wang (2002), member of the committee, first placement: Standard & Poor's, China; Carlo Marinelli (2004), member of the committee, currently at the University College London, UK; Joern Meissner (2005), member of the committee, currently at Kuehne Logistics University in Hamburg, Germany; Srinivas Krishnamoorthy (2005), member of the committee, currently at the Simon Fraser University, Canada; Sabri Celik (2007), member of the committee, first placement - Credit Suisse, New York; Omar Besbes (2008), member of the committee, currently at Columbia GSB; Fazil Pac (2011), member of the committee, currently at Google; Hessam Bavafa (2014), member of the committee, currently at the University of Wisconsin-Madison; Vanitha Virudachalam (2019), advisor, currently at the University of Illinois at Urbana-Champaign; Jiding Zhang (2021), member of the committee, currently at the NYU-Shanghai; Jong Myeong Lim (2022), member of the committee, winner of 2021 MSOM student paper competition.