Curriculum Vitae

10/12/2020

Amol S. Navathe, MD, PhD

Office Address:	Department of Medical Ethics and Health Policy 11 th Floor, Blockley Hall Philadelphia, PA 19104	
Education:		
2001	B.S. Stanford University, Magna Cum Laude (Electrical Engineering & Economic Systems)	
2008	Ph.D. The Wharton School, University of Pennsylvania (Health Care Management and Economics)	
2010	M.D. University of Pennsylvania Perelman School of Medicine	
Postgraduate Training and Fellowship Appointments:		
2003-2010	Medical Scientist Training Program (MSTP) Fellow, National Institutes of Health (NIH)	
2005	National Research Service Award (NRSA) Fellow, Agency for Healthcare Research and Quality (AHRQ)	
2007	Public Health Systems Scholar, AcademyHealth	
2010-2013	Adjunct Senior Fellow, Leonard Davis Institute of Health Economics (LDI), The Wharton School at The University of Pennsylvania	
2011-2012	Intern, Internal Medicine, Brigham and Women's Hospital (BWH) and Harvard Vanguard Medical Associates (HVMA)	
2011-2014	Clinical Fellow, Department of Population Medicine, Harvard Medical School	
2012-2014	Resident Physician, Brigham & Women's Hospital (BWH) and Harvard Vanguard Medical Associates (HVMA)	
Faculty Appointment	<u>ts</u> :	
2014-2015	Adjunct Assistant Professor of Medical Ethics and Health Policy, University of Pennsylvania School of Medicine	
2015-present	Assistant Professor and Core Investigator, Center for Health Equity Research and Promotion (CHERP), Michael J. Cresencz Philadelphia VA Medical Center	
2015-present	Assistant Professor of Medical Ethics and Health Policy, University of Pennsylvania School of Medicine	
2015-present	•	

Hospital and Administrative Appointments:

2014-present Staff Physician, Michael J. Cresencz Philadelphia VA Medical Center 2017-present Associate Director, Center for Health Incentives and Behavioral Economics (CHIBE), University of Pennsylvania School of Medicine Co-Director, Healthcare Transformation Institute, University of Pennsylvania School of Medicine

Other Appointments:

2002-2003	Consultant, McKinsey and Company, Palo Alto, CA
2008	Regional Dissemination Team Coordinator, The Obama Campaign, Health
	Policy Advisory Committee
2008	Fellow, The White House, council of Economic Advisors (CEA),
	Washington, DC
2009-2011	Medical Officer and Senior Program Manager, Comparative Effectiveness
	Portfolio, Office of the Secretary, Department of Health and Human
	Services (DHHS), Washington, DC
2012-2013	Project Director and Co-PI, High-Risk Patient Management, BWH and
	Partners Healthcare, Inc., Boston, MA
2012-present	Founding Director, Foundation for Healthcare Innovation, Washington,
	DC
2013-2017	Moderator, Global Health Delivery Online (GHDOnline) Innovating
	Health Delivery Community, Brigham and Women's Hospital, Boston,
	MA
2013-2015	Managing Director, Healthcare Value Transformation, Navigant
2015-present	Senior Fellow, Leonard Davis Institute of Health Economics
2019-present	
	non-partisan federal agency advising US Congress, Washington, DC

Specialty Certification:

2014 American Board of Internal Medicine

Licensure:

2014-present Pennsylvania State Medical Board

Awards, Honors and Membership in Honorary Societies:

1996	Research Science Institute at the Massachusetts Institute of Technology
1997	Letters of Recognition from Governor Zell Miller and Senator Paul
	Coverdell for academic achievement
2000	Omicron Delta Epsilon, Economics Honor Society
2001	Tau Beta Pi, Engineering Honor Society
2001	Mayfield Fellow, Stanford University
2007	Mack Lipkin Award finalist, SGIM Annual Meeting, Toronto, Canada
2007	Outstanding Student Abstract Panel (one of four students),
	AcademyHealth Annual Research Meeting (ARM)

2007	Most Outstanding Abstract in Health Care Systems theme,
	AcademyHealth Annual Research Meeting, Orlando, FL
2007	Holmes Award in Evaluative Research (best resident/student paper),
	University of Pennsylvania Health System Division of General Internal
	Medicine Research Day
2009	University of Pennsylvania School of Medicine Research Paper Prize,
	Philadelphia, PA
2010	Leonard Davis Institute of Health Economics Prize, Philadelphia, PA
2012	The Daniel Ford Award for Achievement in Health Services and
	Outcomes Research, Johns Hopkins University, Baltimore, MD
2016	Milton W. Hamolsky Junior Faculty Scientific Abstract Award Panel,
	SGIM Annual Meeting, Hollywood, FL
2016	Best of ARM Research Abstract in Social Determinants of Health theme,
	AcademyHealth Annual Research Meeting, Boston, MA
2017	Milton W. Hamolsky Junior Faculty Scientific Abstract Award Panel,
	SGIM Annual Meeting, Washington, DC
2018	Milton W. Hamolsky Junior Faculty Scientific Abstract Award Panel,
	SGIM Annual Meeting, Denver, CO
2018	Best Abstract Award in Healthcare Delivery Innovation theme,
	AcademyHealth Annual Research Meeting. Cited for First Study
	to Apply Behavioral Economics to Physician P4P Programs, Seattle, WA
2020	NIHCM Foundation 26 th Annual Health Care Research Award Finalist
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Memberships in Professional & Scientific Societies and Other Professional Activities:

<u>International</u>	
2006-present	Member, International Health Economics Association (iHEA)
2018-present	Senior Fellow and Expert Advisor, Singapore Ministry of Health. In 2018,
-	member of 5 person team advising Minister of Health Transformation Dr.
	Chorh Chuan Tan on the National Polychronic Capitation Model. In 2019,
	asked to lead and coordinate 3 person team to advise Minister Gan Kim
	Yong and Director of Finance Dao Song Cham on health care financing.
	Quarterly teleconferences and one annual trip to Singapore.
2019-present	Expert Advisor on Bundled Payments, Health Financing, and Behavioral
	Economics, Province of Ontario, Canada. Advise Imtiaz Daniel, Ontario
	Hospital Association (OHA), and Ontario Ministry of Health on a semi-
	annual basis. Preparatory work since summer 2019.
2019-present	External Advisor, National Bundled Payments Program, Social Security
_	Program, France. Preparatory work since summer 2019.

<u>National</u>

2005-present Member, AcademyHealth

- Student member 2006-2011
- Graduate Medical Education Trainee member 2011-2015
- Faculty member 2015-present
- Reviewer of research abstracts for the Annual Meetings 2016-present

2006-2010 2006-present 2006-present 2011-2013 2013-2016 2018-present	Board Member, Multi-Player Claims Database, collaborative between the Department of Health and Human Services and OptumInsight, Washington, DC Advisory Board Member, CareMessage.com, San Francisco, CA
<u>Local</u> 2006-present	Member, William Pepper Medical Society (Internal Medicine)
Editorial Positions: 2012-present	·
2015-present	Science and Innovation Reviewer, Journal of General Internal Medicine, NEJM, Health Services Research, JAMA Internal Medicine, JAMA, Annals of Internal Medicine,
2019	Health Affairs Outstanding Reviewer for <u>Health Services Research</u>
Academic and Institu	tional Committees:
2003-2010	Member, University of Pennsylvania School of Medicine Curriculum Committee
2003-2015	Founder, Healthcare Policy and Systems Group at University of Pennsylvania School of Medicine
2015-present 2016-present	
2017-present	
Maior Acadamia and	Clinical Tanahina Dannonsihilitias
2014-2017	Clinical Teaching Responsibilities: Section leader for University of Pennsylvania Medical Health Care Systems MOD 320
2015-present 2015-present	Attending Physician, Teaching Service, Medicine, Philadelphia VAMC
2018-present	

Other Teaching Responsibilities

2015-present Research mentor and PhD Committee for Amelia Bond (PhD '18), currently Assistant Professor at Weill College of Medicine, Cornell

	University. She is a co-author of publications in the Bibliography section of this CV
2015-present	Research mentor for Joshua Liao, MD, MHP, University of Pennsylvania DGIM Fellow, currently Assistant Professor of Medicine at University of
	Washington. He is a co-author of publications in the Bibliography section of this CV
2015-present	Research mentor for Alex Bain, MD, currently a Resident at Weill
	College of Medicine, Cornell University. He is a co-author of publications in the Bibliography section of this CV
Oct 2015	"Behavioral Economics and Provider Incentives," Center for Health
Dec 2015	Incentives and Behavioral Economics (CHIBE) Retreat, Cape May, NJ "Behavioral Economics and Provider Incentives," Robert Wood Johnson/
2016	CHIBE Symposium, Philadelphia, PA
2016-present	Research mentor and PhD Committee member for Joseph Martinez, MD, PhD candidate. He is a co-author of publications in the
	Bibliography section of this CV
May 2016	"Shifting Physician Behavior Toward Better Care Using Behavioral Economics," Department of Medical Ethics and Health Policy External
	Advisory Board Meeting, Philadelphia, PA
Jul 2016	"Financing of Healthcare Delivery," National Clinical Scholars Program,
Dec 2016	Philadelphia, PA "Shifting Physician Behavior Toward Better Care Using Behavioral
	Economics," UPHS Center for Innovation, Philadelphia, PA
Oct 2016	"Big Data and Health Informatics," Wharton e-Health MBA Course
Oct 2016	"Updates in Health Policy," University of Pennsylvania School of
Nov 2016	Medicine medX Group Lecture Series, Philadelphia, PA "Overview of US Healthcare Delivery," Janssen Pharmaceuticals Wharton
1101 2010	Visit, Philadelphia, PA
Nov 2016	"Physician Payments," Lecture in Dr. Daniel Polsky's Wharton Health
N. 2016	Economics undergraduate course, Philadelphia, PA
Nov 2016	"Natural Language Process Applied to Health Services Research," Wharton Health Economics PhD course, Philadelphia, PA
Apr 2017	"ACOs, Bundled Payments and Post-Acute Care," Leonard Davis Institute
-	External Advisory Board Meeting, Philadelphia, PA
2017-present	Research mentor and PhD committee member for Sarah Dykstra, PhD
	Candidate. She is a co-author of publications in the Bibliography section of this CV
2017-present	Research mentor for Robin Wang, 2017 Summer Undergraduate Minority
•	Research scholar (SUMR), currently a medical student at the University of
	Pennsylvania Perelman School of Medicine. She is a co-author of a
2017 procent	publication in the Bibliography section of this CV Research mentor for Ulysses (Ace) Isidro, 2017 Summer Scholars
2017-present	Program for Students Underrepresented in Medicine, currently University
	of Pennsylvania Perelman School of Medicine Student. Ace has discussed
	our research during poster presentations at meetings for Society of General

	Internal Medicine, National Student Research Forum (2 nd place Poster
	Presentation – Public Health Category, AcademyHealth, and American
	College of Physicians PA Chapter SE Region (1st place Poster
	Competition in Research Category); and as an abstract and oral
	presentation at New England Science Symposium. He is a co-author of a
	publication in the Bibliography section of this CV
2017-present	Primary research mentor for Yash Shah, University of Pennsylvania
	undergraduate student, currently a medical student at New Jersey Medical
	School. He is a co-author of research publications in the Bibliography
	section of this CV
2017-2019	Research mentor for Koushal Rao, University of Pennsylvania
	undergraduate student
2017-2019	Research mentor for Shivani Prakash, University of Pennsylvania
	undergraduate student
2017-present	Research mentor for Claire Dinh, Harvard Medical Student. She is a
•	co-author of publications in the Bibliography section of this CV
2017-2019	Research mentor for Jessica Dong, graduate student in the Health Care
	Management Department of The Wharton School
2017-present	Research mentor for Michael Harhay, MPH, PhD, Fellow in the Center for
-	Health Incentives and Behavioral Economics Research, and Assistant
	Professor in the Department of Epidemiology and Biostatistics
2017-present	Research mentor for Josh Rolnick, MD, JD, National Clinical Scholar,
•	currently a Medical Director for Veterans Affairs. He is a co-author of a
	publication in the Bibliography section of this CV
2017-present	Research mentor for Rebecca Anastos-Wallen, MD, former medical
-	student, currently a resident physician at University of Pennsylvania
	Health System
2017-2019	Research mentor for Amrita Sehgal, former MBA candidate, currently a
	Business Development Manager at Clarify, Inc.
2017-present	Research mentor for Ravi Parikh, MD, Instructor in Health Policy and
-	Hematology/Oncology. Mentored from resident to fellow to faculty status.
	He is a co-author of publications in the Bibliography section of this CV
2017-present	Research mentor for Ashwin Nathan, Cardiology Fellow
Jul 2017	"Financing of Healthcare Delivery," National Clinical Scholars Program,
	Philadelphia, PA
Sep 2017	"Physician Payment Models," HCMG 213: Health Care Management and
-	Strategy. Guest lecturer in Drs. Ashley Swanson's and John Kimberly's
	Wharton class, Philadelphia, PA
Oct 2017	"Predicting the Future: Transforming Big Data into Smarter Care,"
	Leonard Davis Institute 50 th Anniversary Symposium panel, Philadelphia,
	PA
Oct. 2017	"Applications of Behavioral Economics to Physicians," CHIBE Roybal
	Retreat, Skytop, PA

2018-present	Research mentor for Eric Shan, 2018 Summer Undergraduate Minority Research Scholar (SUMR). He is a co-author of publications in the
	Bibliography section of this CV
2018-present	Research mentor for Jack Huang, MD student. He is a co-author of
2018-present	publications in the Bibliography section of this CV Research mentor for Daniel Herman, MD, PhD, Assistant Professor of Pathology and Laboratory Medicine and Director, Endocrine Laboratory, at the University of Pennsylvania Perelman School of Medicine, including formal mentor for Dr. Herman's recently awarded Doris Duke Career
	Development Award.
May 2018	"The Impact of Bundled Payments on the Cost and Quality of Care," Leonard Davis Institute/School of Medicine Health Services Research Seminar Series, Philadelphia, PA
Jun 2018	"Predicting Undetected Sepsis," Department of Emergency Medicine
5 4 1 2 5 1 5	Research in Progress, Philadelphia, PA
Jul 2018	"Behavioral Economics and Provider Payment," HP/CHIBE/CHCI Interns and Students. Philadelphia, PA
Sep 2018	"Bundled Payment as Major Alternative Payment Model," guest lecturer
7 2010	in Rob Burns' Intro to US Healthcare System course, Philadelphia, PA
Jan 2019	"Moving Forward With Bundled Payments, Starting With The Evidence,"
Feb 2019	Department of Neurosurgery Grand Rounds, Philadelphia, PA "Bundled Payments and Accountable Care Organizations," HCMG 845: Managed Care and Industrial Organization of Health Care, Philadelphia,
Aug 2019	PA "Behavioral Economics and Provider Payment," HP/CHIBE Intern
Feb 2020	Seminar, Philadelphia, PA "Bias in Clinical Risk Prediction Algorithms," EHR STAT Method Working Group, Philadelphia, PA
Feb 2020	"The Evidence on Bundled Payments," HCMG 845: Managed Care and Industrial Organization of Health Care, Philadelphia, PA
July 2020	"Financing of Healthcare Delivery," HPR 600: Intro to Health Policy and Innovation Science, Philadelphia, PA
Aug 2020	"Healthcare Innovation and Operations Panel," panel moderator, MHCI Seminar: Innovating and Leading in Disruption, Philadelphia, PA
Lectures by Invitation	ı (Last 5 years):
Jun 2016	"Transforming Primary Care Payment in Hawaii," Innovation Station
	presentation, AcademyHealth, Boston, MA
Oct 2016	"Behavioral Economics and Shifting Behavior of Providers and
	Consumers Towards Better Health," Centers for Medicare & Medicaid
Mar 2017	Services Learning Action Summit, Washington, DC "ACOs, Bundled Payments and Post-Acute Care," Independence Blue
1 11 (11 201 /	Cross, Philadelphia, PA
Jun 2017	Real-time feedback in Pay-for-Performance: Does more information lead
	to improvement? AcademyHealth, New Orleans, LA
Oct 2017	"Innovation in Bundled Payments," Cleveland Clinic 2017 Advanced

	Payment Summit, Cleveland, OH
Oct 2017	"Population Health ACOs," Cleveland Clinic 2017 Advanced Payment
OCt 2017	Summit, Cleveland, OH
Feb 2018	"Value Based Care Panel," Quality Cancer Care Alliance Winter
100 2010	
Eab 2019	Leadership Summit, Las Vegas, NV
Feb 2018	"Practicing Oncology in the Era of Value Based Care," Quality Cancer
. 2010	Care Alliance Winter Leadership Summit Keynote, Las Vegas, NV
Apr 2018	"Review of Medicare Episode-Based Payment Programs on Mandatory vs.
	Voluntary Bundled Payments," Government Accountability Office (GAO)
	Briefing, Philadelphia, PA
Jun 2018	"Effects of Major Joint Replacement Bundled Payments on Medicare and
	Commercial Post-Discharge Spending," Discussant, American Society of
	Health Economists (ASHEcon) Annual Conference, Atlanta, GA
Jun 2018	"Predicting Undetected Sepsis," Department of Emergency Medicine
	Research in Progress, Philadelphia, PA
Jun 2018	"Publish or Perish: Meet the Editors Part 1," Panelist, AcademyHealth
	Research Meeting, Seattle, WA
Aug 2018	"Behavioral Economics and Health," Center for Medicare and Medicaid
a •010	Innovation, Baltimore, MD
Sep 2018	"Predicting Undetected Sepsis," Visiting Professor and Hospital Grand
0 0010	Rounds at Weill Cornell Medical Center, New York City, NY
Oct 2018	"The Future of Bundled Payments," Panel Moderator, Cleveland Clinic's
0 0010	Advanced Payment Summit, Cleveland, OH
Oct 2018	"Population Health: The Cornerstone of Value-Based Care," Panel
	Moderator, Cleveland Clinic's Advanced Payment Summit, Cleveland,
0 . 2010	OH
Oct 2018	"The Impact of Bundled Payments on the Planning and Delivery of Post-
	Acute Care," Cleveland Clinic's Advanced Payment Summit, Cleveland,
N. 2010	OH
Nov 2018	"Markers of Success in Bundled Payment Programs," American Hospital
F 1 2010	Association Webinar, Philadelphia, PA
Feb 2019	"Segmenting High Need, High Cost Patients into Potentially Actionable
3.6 2010	Subgroups," VA High Risk Investigator Network, Pittsburgh, PA
May 2019	"Effects of Financial Bonus Sizes, Loss Aversion, and Increased Social
	Pressure on Physician Pay-for-Performance: A Randomized Trial and
T 2010	Cohort Study", NIH Collaboratory, Duke University, via Webex
Jun 2019	"Publish or Perish: Meet the Editors Part Two," Panelist, AcademyHealth
I 2010	Annual Research Meeting, Washington, DC
Jun 2019	"Publication of the Year – Effect of Peer Comparison Letters for High-
	Volume Primary Care Prescribers of Quetiapine in Older and Disabled
	Adults. A Randomized Clinical Trial" Panelist, AcademyHealth Annual
I 2010	Research Meeting, Washington, DC
Jun 2019	"Forging Effective Collaborations between Researchers and Employers to
	Promote Healthcare Quality and Value," Panelist, AcademyHealth Annual
	Research Meeting, Washington, DC

Sep 2019	"Transforming Primary Care Payment," Speaker, National Institute of
0 . 2010	Healthcare Management (NIHCM) Meeting, Washington, DC
Oct 2019	"The Crisis of Scalability in Healthcare," Closing Keynote, Value Based
N. 2010	Innovation Summit – Cleveland Clinic, Cleveland, OH
Nov 2019	"Patient Selection and Bundled Payments," The Dartmouth Institute,
Jan 2020	Lebanon, NH "Bundled Payments – Where Are We Now and Where Are We Going?"
Jan 2020	Data and Methods Hub Seminar, Institute for Healthcare Policy &
	Innovation, University of Michigan, Ann Arbor, MI
Jan 2020	"Payment Model Interfaces," opening remarks, Duke-Margolis Center's
Jun 2020	Condition-based Payment Reform meeting, Washington, DC
Sep 2020	"Racial Bias in a VA Algorithm for High-Risk Veterans," Complexity in
Sep 2020	Women Veterans meeting, Philadelphia, PA
	vi olien veterans meeting, i maaterpina, i ii
Organizing Roles in	Scientific Meetings:
Oct 2004	Organizer, The Langfitt Symposium on Health Policy: Drug Re-
	importation: Problem or Panacea? Invited panelists from Wharton Health
	Care Systems Department, Merck Pharmaceuticals, Consumer's Union,
	and the AARP. University of Pennsylvania, Philadelphia, PA
Jun 2016	Lead Organizer, "MACRO-economics," Press Briefing, National Press
	Club, Washington, DC
Nov 2016	Co-Lead Organizer, Roundtable: "Systems Thinking to Improve
	Healthcare Delivery," Chicago, IL
Oct 2018	Leader, Forum: "Moving Forward with Bundled Payments," Press
	Briefing, National Press Club, Washington, DC
	th PI, Co-PI, Contact Multi-PI and annual direct costs):
2007-2008	LDI Pilot Grants, "Formation of Surgeon Peer Reputation and Impact on
2014 2017	Technology Adoption," Co-PI. \$6,600
2014-2015	Partners Siemens Research Council grant, "Utilizing Unstructured Data
2015 2017	for Risk Stratification," Co-PI). \$125,000
2015-2017	The Commonwealth Fund grant, "Using Behavioral Economics to Create
	Effective Provider Incentives Phase 2," Co-PI. In this project, we studied
	how behavioral economic principles can improve the effectiveness of
	physician incentives to deliver higher quality and lower cost care. We tested the application of specific behavioral economic principles including
	social pressure and loss aversion in incentive design and implementation. \$207,583
2015-2018	The Robert Wood Johnson Foundation, "Studying Behavioral Economic
2013-2010	Principles in Incentivizing Physicians to Deliver Higher-quality, Lower-
	cost Care and the Impact on Patient Outcomes," Co-PI. In this project, we
	studied how behavioral economic principles can improve the effectiveness
	of physician incentives to deliver higher quality and lower cost care and
	the resulting impact on patient reported outcomes. We will test the
	application of specific behavioral economic principles including social
	11

	pressure and loss aversion in incentive design and implementation and looked at the effects on patient outcomes, experiences, and beliefs.
2015-2019	\$205,089 Pennsylvania Department of Health, "Smarter Big Data for a Healthy Pennsylvania: Changing the Paradigm of Healthcare," PI for Aim 1. Aim 1: In this project, we study the use of big data methods to combine multi- modal data to study clinical event prediction in the hospital, during
2015-2020	transitions to the outpatient setting, and at the community level. \$901,817 The Robert Wood Johnson Foundation, "Physician Judgment and Machine Predictions: Improving Medical Decisions Using Machine Learning," Contact Multi-PI. In this project, we study how machine learning based
2016-2018	predictive models can be used to improve emergency room physician decisions for sepsis patients. \$495,775 Anthem, Inc. grant, "UPenn-CareMore Research Collaboration on High Need Patients and Care Delivery Management," PI. In this project, we will utilize CareMore data to identify and categorize high need patients
	based on their clinical and demographic characteristics as well as utilization patterns. We will then examine the impact of CareMore's ESRD care model on the quality outcomes and cost of care that its patients receive. \$91,975
2016-2019	Oscar Insurance grant, "Oscar Health Physician and Member Engagement," PI. Project Aim 1: Testing the impact of different care team models and enhancements on results for high cost members with at least one chronic condition; Project Aim 2: Social comparisons of provider
2016-2018	performance - application to C-sections. \$854,252 The Commonwealth Fund, "Evaluating the Impact of Medicare's Joint Replacement Bundled Payment Program on the Cost and Quality of Care," PI. In this project, we performed a quasi-experimental retrospective
2016-2020	evaluation of the effects of the BPCI program on the quality and costs of care for joint replacements, the most common condition in BPCI. \$45,129 Hawaii Medical Services Association grant, "Specialist Transformation in Hawaii," Contact Multi-PI. In this project, we will develop new payment models for specialist care providers, implement randomized controlled
2017-2018	trials, and evaluate the impact of incentive design features from classical and behavioral economics. \$1,790,001 The Commonwealth Fund grant, "Evaluating the Impact of Bundled Payment for Care Improvement on the Value of Care," Contact Multi-PI. In this project, we propose a quasi-experimental retrospective evaluation
2017-2020	of the effects of the BPCI program on the quality and costs of care for joint replacements, the most common condition in BPCI. \$289,375 Cigna Insurance grant, "Provider compensation models workshop facilitation," PI. Conduct workshop on behavioral economics and review opportunities to enhance product benefit design and episode design to
2017-2022	improve value based payments. \$140,000 Health Research and Education Trust (HRET) grant, "Penn LDI-AHA

Bundled Payment Survey," PI. Conduct a survey to identify key challenges facing HRET member institutions in the evolving payment landscape and derive and disseminate insights from data analysis and member experience on best practices to succeed toward higher quality while lowering costs. \$20,000 2018-2019 Hawaii Medical Services Association grant, "PMPM payment for primary care physicians in payment transformation," PI. In this project, we will design and build a new value-based PMPM. \$55,900 2018-2019 The Commonwealth Fund grant, "Examining Overlap Between ACOs and Bundled Payments," PI. In this project, we propose a description of the extent and time trend in overlap between major Medicare ACO (Pioneer, MSSP, NextGen) and bundled payment (BPCI Model 2, CJR, BPCI-Advanced) programs. \$83,815 2018-2019 Health Services Research and Development Service (HSR&D)/VA grant, "Segmenting High-Need, High-Cost Veterans Into Potentially Actionable Subgroups," PI. The main objective of this study is to apply statistical and machine learning clustering methods to classify high-need, high-cost (HNHC) Veterans into clinically actionable subgroups based on detailed clinical information extending beyond diagnosis codes. \$92,459 2018-2020 Donaghue Foundation grant, "The REDUCE Trial: Randomized Trial of EHR Defaults and Using Social Comparison Feedback to Effectively Decrease Opioid Prescription Pill Burden," Contact Multi-PI. Pragmatic randomized controlled trial to evaluate the effect of physician social comparisons and electronic health record defaults on reducing opioid prescription pill burden. \$381,543 2019-2022 Hawaii Medical Services Association grant, "Drivers of medical cost trend and specialty payment model design and testing," PI. Institution will provide research, analyses and strategic input services for HMSA's health care delivery strategy. \$1,851,852 2019-2023 National Institutes of Health (NIH), R01 grant "Comparing the Impact of Voluntary and Mandatory Bundled Payments on Disparities in Surgical Care," Contact Multi-PI. This study examines how bundled payments implemented via voluntary and mandatory participation impact access and outcomes among vulnerable patients – evidence needed to inform policymakers about the broader policy impact and whether to scale bundled payments through voluntary and/or mandatory participation. \$1,627,348 2019-2024 National Institutes of Health (NIH) R01 grant, "Caregiving after discharge from the hospital," Co-I. Caregiving burden is a large and growing concern in the US, particularly for persons with dementia and, as the use of inpatient post-acute care has been declining, caregiving burden in the post-acute period is expected to grow. This project examines changes in caregiving in the post-acute period, particularly among persons with dementia. The results from this study will provide empirical evidence

regarding how the declining use of SNF has impacted caregiving in the post-acute period. \$1,429,218 2020-2021 University of Pennsylvania/Boettner Center for Pension Security Quartet Pilot Research Program grant, "Estimating the Causal Effects of Managed Care in Medicare," Co-PI. The federal government is facing intense financial pressure as the Medicare program approaches insolvency in 2026 due to an aging population. In this project, we examine the value generated by a cornerstone Medicare program, Medicare Advantage, the private plan option that has rapidly expanded to cover over 22 million beneficiaries. Our proposed approach to estimating causal effects of MA on patient outcomes (compared to traditional Medicare fee-for-service) improves upon prior work by using a novel instrumental variable that uses predicted out-of-pocket savings from enrolling in MA to mitigate selection. \$14,900 2020-2021 Embedded Healthcare grant, "Reduce total cost of care and improve quality outcomes project for United Healthcare," PI. The objective of this collaboration is to innovate on new provider financial and non-financial incentive models that will reduce total cost of care and improve quality outcomes for members of United Healthcare. \$285,870 2020-2021 Embedded Healthcare grant, "BCBS NC Fee schedule rebalancing and simulation modeling," PI. The hypothesis of the BCBS project is that by incorporating behavioral economics design principles into a novel physician fee schedule, and applying a scientific design-analyze-refine method to the roll-out of their novel Nova insurance project, BCBS can reduce unnecessary spending, develop meaningful analytics to share with their provider partners, and conduct analyses to course-correct and redefine the fee schedule over time to ensure success. \$274,450 2020-2021 Hawaii Medical Services Association grant, "HMSA Health Strategy COVID-19 Deliverables," PI. Institution will provide research, analyses and strategic input services for HMSA's strategy for the State of Hawaii's economic recovery of COVID-19. \$27,400 VA grant, "Predictive Algorithms," PI. Bridge funding for 6 months for 2020-2020 Pilot program. \$103,504 2020-2020 NIHCM grant, "The Impact of COVID-19 on Health Care Spending and Practice Patterns," Contact Multi-PI. In this study, we will use administrative claims from 2015-2020 to study the short- and intermediate-term impacts of COVID-19 on health care spending, utilization, and outcomes across all lines of business. \$35,000 2020-2025 National Institutes of Health grant, "I-SCREEN: Increasing Screening for Cancer using a Randomized Evaluation of EHR-based Nudges," Contact Multi PI. This project will pilot nudge interventions among older adults and then tailor nudges to overcome screening barriers facing these patient groups. In the R61 phase, we will conduct a pragmatic, multisite trial evaluating the ability for tailored nudges to clinicians and patients to improve vaccination rates and reduce disparities in care. \$2,837,995

National Institutes of Health grant, "BE IMMUNE: Behavioral Economics to Improve and Motivate vaccination Using Nudges through the EHR," Co-PI. In this study, we will use analytical methods to identify high-risk subgroups, test personalized nudges to address barriers among these groups, and then implement a pragmatic, multisite trial to evaluate the effectiveness of personalized nudges to clinicians and patients to improve vaccination rates among older adults and reduce disparities in care." (\$2,805,577.00)

<u>Pending</u>

Agency for Health Care Research and Quality grant, "The effect of voluntary bundled payments on vulnerable populations" Contact Multi PI. Research to inform payment policy that promotes parity, this study examines how voluntary bundled payments impact access and outcomes for racial/ethnic minorities and individuals with low socioeconomic status (SES), vulnerable groups that have long faced disparities in health care access and outcomes. \$1,588,795.

2021-2022 Donaghue Foundation grant, "Reducing low value care through a

Donaghue Foundation grant, "Reducing low value care through a precision approach that tailors interventions to each individual's behavioral phenotype," Co-PI. The goal of this project is to develop algorithms that use an individual's behavioral phenotype to match them to the best intervention to change their health behaviors. \$429,176

VA grant, "Racial Bias in a VA Algorithm for High-Risk Veterans," PI. In this project, we will systematically examine algorithmic unfairness in the VA CAN algorithm and develop approaches to mitigate it, including testing the incorporation of SDoH metrics. \$862,190

National Institutes of Health grant, "The impact of population and episode-based payment models on surgical disparities," Contact Multi PI. This study examines how population- and episode-based APMs that extensively cover surgical care affect disparities in surgical access and outcomes for vulnerable patients, and whether effects vary by providers' ability to manage financial accountability. \$3,105,061

VA grant, "A Randomized Trial of Behaviorally Designed Gamification and Social Incentives to Increase Physical Activity among Overweight and Obese Veterans," Co-PI. This project seeks to compare the effectiveness of behaviorally designed gamification that encourages Veterans to collaborate or compete on physical activity levels and examine personalizing treatment choice based on Veteran characteristics. \$1,146,277

Bibliography:

*denotes mentee

Research Publications, peer reviewed:

- 1. **Navathe AS**, Harris JJ, Kotagal M, Parekh A, Bhatt J: Barack Obama's Plan for a Healthy America. The Context Journal 2008 2
- 2. **Navathe AS**, David G: The Formation of Peer Reputation among Physicians and its Effect on Technology Adoption. <u>Journal of Human Capital</u> 2009 3(4):289-322
- 3. **Navathe AS**, Conway PH: Optimizing Health Information Technology's Role in Enabling Comparative Effectiveness Research. <u>American Journal of Managed Care</u> 2010 Dec 16(12 Suppl HIT): SP44-7
- 4. **Navathe AS**, Volpp KG, Konetzka RT, Press MJ, Zhu J, Chen W, Lindrooth RC: A Longitudinal Analysis of the Impact of Hospital Service Line Profitability on the Likelihood of Readmission. <u>Medical Care Research and Review</u> 2012 Aug 69(4):414-31
- Lindrooth RC, Konetzka RT, Navathe AS, Zhu J, Chen W, Volpp KG: The Impact of Profitability of Hospital Admissions on Mortality. <u>Health Services Research</u> 2013 Apr 48(2 Pt 2):792-809
- Navathe AS, Silber JH, Small DS, Rosen AK, Romano PS, Even-Shoshan O, Wang Y, Zhu J, Halenar MJ, Volpp KG: Teaching Hospital Financial Status and Patient Outcomes Following ACGME Duty Hour Reform. <u>Health Services Research</u> 2013 Apr 48(2 Pt 1): 476-98
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