

Primary care physician practice styles and patient care: Evidence from physician exits in Medicare

Improving Health Outcomes for an Aging Population: Short Talk

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Origins of P01 Pilot #4

- Itzik was a postdoc at NBER. I was a postdoc at Dartmouth. We met at the RAND Summer Institute
- We were interested in measuring primary care physician (PCP) practice styles and quality
 - Patients receive most of their frontline health care from primary care providers
 - PCPs coordinate subsequent care for patients
 - In 2016, there was virtually no (quasi-experimental) research quantifying the impacts of PCP practice styles on patient health care utilization or outcomes

Our Research Question: To what extent do differences in PCP practice styles explain variation in patient care within regions?

Fee-for-service Medicare data has nice features

- Traditional Medicare is typically an absorbing state for patients
- We observe all of a patient's interactions with the health care system
- We can identify PCPs and attribute patients to PCPs
- Sample sizes are large enough to quantify physician practice styles
- The nationwide panel is large enough and long enough to (1) observe physician movements and (2) estimate event studies

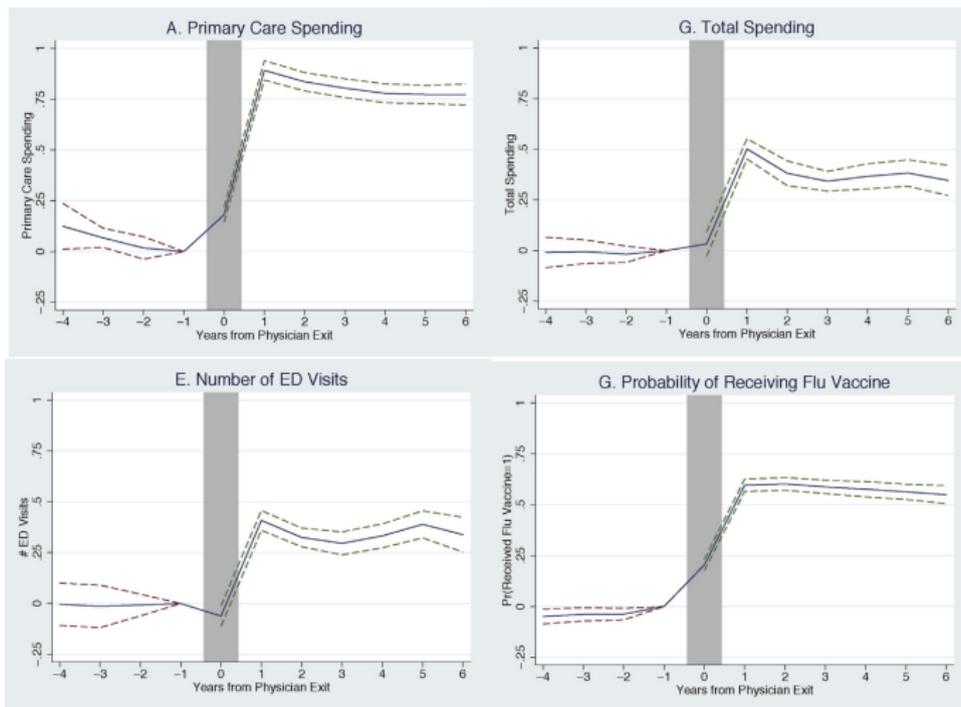
Motivation for our empirical strategy

- Initially we expected to estimate value-added models, adopted from the economics of education literature
- But then Finkelstein et al. (2016) pioneered a quasi-experiment using patient movers to decompose regional variation in health care utilization into supply-side vs. demand-side factors
 - Supply-side factors include health care provider beliefs and incentives
 - Demand-side factors include patient preferences for utilization
 - They found that 40-50% of the across-region variation in utilization is explained by supply-side factors [▶ Event Study](#)
- We adopted a modified approach. We used physician exits to show how differences in PCP practice styles contribute to within-region variation in health care utilization and quality-of-care across patients

Our approach

- 1 Use a 20% sample of Medicare Part B claims from 2007-2013 to attribute Medicare patients to PCPs
- 2 Use the Medicare claims to characterize physician practice styles in terms of utilization and quality-of-care
- 3 Use breaks in PCP-patient relationships resulting from physician relocations and retirements to measure changes in PCP practice styles within patients over time
 - Intuition: Some patients will switch to “higher intensity” PCPs, while others will switch to “lower-intensity” PCPs
- 4 Estimate event study models using the panel of patients affected by PCP exits to show how PCP practice styles affect health care utilization and quality-of-care

Changes in health care utilization and quality-of-care



Notes: These figures plot the event study estimates around the date of PCP exit for patients who switch to higher intensity (quality) PCPs compared to patients who switch to lower intensity (quality) PCPs. At $t = 1$, the original PCP has exited and all patients have been attributed to new PCPs.



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ABSTRACT

Primary care physicians (PCPs) provide frontline health care to patients in the U.S.; however, it is unclear how their practice styles affect patient care. In this paper, we estimate the long-lasting effects of PCP practice styles on patient health care utilization by focusing on Medicare patients affected by PCP relocations or retirements, which we refer to as "exits." Observing where patients receive care after these exits, we estimate event studies to compare patients who switch to PCPs with different practice style intensities. We find that PCPs have large effects on a range of aggregate utilization measures, including physician and outpatient spending and the number of diagnosed conditions. Moreover, we find that PCPs have large effects on the quality of care that patients receive, and that all of these effects persist for several years. Our results suggest that switching to higher-quality PCPs could significantly affect patients' longer-run health outcomes.

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Thank you for the opportunity

- We want to thank Kate Baicker, Partha Bhattacharyya, and everyone at the NBER who helps facilitate pilot projects (e.g., Janet, Joan, Mohan)
- This pilot played an important role in our career development
 - It was our first opportunity to work with Medicare claims data
 - I am still working on research related to physician quality, but with an eye toward health disparities
 - Itzik continues to contribute to the NBER Aging program by using well-identified quasi-experiments to study peoples' labor supply and retirement decisions

Finkelstein et al. (2016) event study

