

Monitoring for Waste: Evidence from Medicare Audits

Based on BFI Working Paper No. 2023-110, "[Monitoring for Waste: Evidence from Medicare Audits](#)," by Maggie Shi, University of Chicago

Every dollar Medicare spent on monitoring generates \$24–29 in government savings, mainly from the deterrence of medically unnecessary future care. Monitoring increases upfront investments in technology to assess the necessity of care.

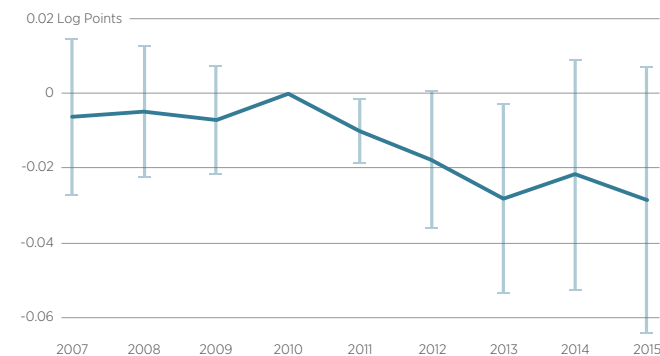
Combating waste is a perennial problem for public programs. The Office of Management and Budget [estimates](#) that over 7% federal spending in the United States was wasted in 2021, and by some estimates, over half of wasted federal spending goes undetected. Monitoring for waste, however, presents a challenging tradeoff: while monitoring could in principle reduce wasteful spending, it can also increase hassle costs or add to the administrative burden associated with these programs. Despite the importance of this question,

there is little empirical evidence on the magnitude and nature of the tradeoffs associated with monitoring for waste in public spending. Motivated by this, this paper considers these tradeoffs in the context of Medicare, the federal health insurance program for the elderly and disabled.

The author studies this question in the context of Medicare audits. In response to growing concern about public funds being wasted spending on unnecessary short-term hospital stays, Medicare directed private auditing firms (Recovery Audit Contractors, or RACs) to monitor hospitals' Medicare claims beginning in 2011, and reclaim payments for unnecessary inpatient admissions. The author conducts her analysis using data from these audits, which she matches to Medicare inpatient claims data. She also collects information about the hospitals in her dataset, including their administrative costs and technological investments.

Using these data, the author uses two approaches to identify the causal effect of an audit: First, she compares neighboring hospitals that are subject to differentially aggressive RACs. Second, she compares groups of patients who, because of

Figure 1 • Medicare Inpatient Revenue



Note: This figure plots annual Medicare inpatient revenues (measured in log points), accounting for the aggressiveness of hospitals' local RACs. Inpatient revenue is defined as the sum of all Medicare inpatient payments, and each coefficient represents the effect of a one percentage point increase in the 2011 audit rate on hospital-level revenues.

rules that governing auditing, have visits that are subject to arbitrarily different audit likelihoods. She finds the following:

- Audits reduce Medicare spending on hospital admissions substantially—every dollar that Medicare spends on monitoring hospitals recovers \$24–29. Ninety percent of these savings stem from the deterrence of future spending, rather than the recovery of prior spending, as hospitals subject to more aggressive RACs tend to reduce their admissions. On average, a one percentage point (46%) increase in the share of a hospital’s admissions that are audited leads to a 2% drop in admissions. Extrapolating these effects to the author’s full hospital sample, the RAC program led to upwards of \$9 billion in Medicare savings from 2011 to 2015.
- Monitoring primarily deters low-value admissions. Hospitals are less likely to admit patients with higher audit risk, but these patients were no more likely to return to the hospital due to a missed diagnosis.
- Audits lead hospitals to invest in compliance technology to assess whether admitting a patient is medically necessary. Hospitals subject to more audits are more likely to adopt “medical necessity checking” software, which cross-references electronic health records with payer (i.e., insurer) rules to provide guidance on the medical necessity of care in real time. Accordingly, hospital administrative costs rise: for every \$1000 in Medicare savings in 2011–2015, hospitals incur \$178–218 in administrative costs. But these costs are mostly concentrated as a one-time spike that occurs at the onset of the program expansion in 2011, rather than ongoing hassle costs.

The upshot is that monitoring can be a highly effective tool to combat waste in public spending and improve compliance with policy goals. Notably, policymakers only considered the recovered payments when assessing the cost-effectiveness of the RAC program, making the large deterrence effect revealed here particularly striking and underscoring the importance of incorporating measures of deterrence into cost-effectiveness evaluations.

READ THE WORKING PAPER

NO. 2023-110 · AUGUST 2023

Monitoring for Waste: Evidence from Medicare Audits

bfi.uchicago.edu/working-paper/2023-110

ABOUT OUR SCHOLAR



Maggie Shi

Assistant Professor, Harris School of Public Policy
maggie-shi.com



THE UNIVERSITY OF CHICAGO
**HARRIS SCHOOL
OF PUBLIC POLICY**