

Long-Term Care Hospitals: A Case Study in Waste

Authors: Liran Einav, Stanford University; Amy Finkelstein, Massachusetts Institute of Technology; Neale Mahoney, Stanford University

Issue Summary: The post-acute care sector provides patients with rehabilitation services following an acute hospital stay. An administrative carve-out in the 1980s resulted in the creation of 40 long-term care hospitals (LTCHs) that were paid differently (and more generously) than other types of post-acute care providers. Since then, the number of LTCHs has expanded dramatically and reached 400 (mostly for-profit) facilities by 2014. LTCHs are a particularly expensive place to receive post-acute care. On average, admission to a long-term care hospital raises post-acute care spending by the Medicare fee-for-service program by approximately \$30,000 per admission relative to alternative settings for care delivery (Einav et al. 2019). Patients discharged to an LTCH also owe more money out of pocket, and do not spend less time in institutional care or have lower mortality than if they were discharged to other settings. Taken together, the evidence indicates that Medicare could save roughly \$4 billion per year (based on 2017 data) with no harm to patients by not allowing for discharge to LTCHs or by paying them on par with how other post-acute care providers are reimbursed.

Policy Proposal: Policy makers should eliminate the administratively created concept of LTCHs and have the Medicare program reimburse those facilities on par with how skilled nursing facilities are paid.

Total Savings: \$4 billion per year in spending (based on 2017 data) on traditional Medicare beneficiaries (1% of traditional Medicare spending).

Related Literature and Evidence

“Long-Term Care Hospitals: A Case Study in Waste” (2019). *NBER Working Paper 24946* (Liran Einav, Amy Finkelstein, Neale Mahoney).

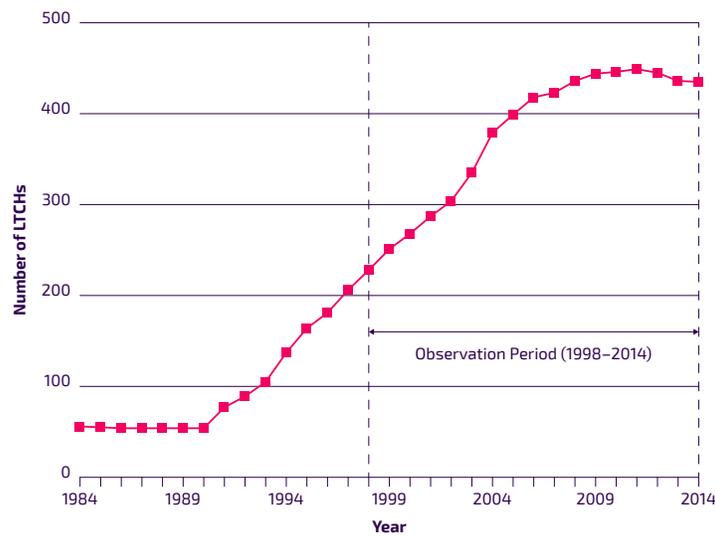
Introduction

The post-acute care sector provides patients with rehabilitation services following an acute hospital stay. It includes both facility-based care—care in skilled nursing facilities (SNFs), inpatient rehabilitation facilities (IRFs), and long-term care hospitals (LTCHs)—and home-based care provided by home health agencies (HHAs). Within the post-acute care landscape, LTCHs generally provide the most intensive care, SNFs and IRFs provide intermediate levels of care, and HHAs provide the least intensive care.

The Medicare fee-for-service program spends approximately \$60 billion per year on post-acute medical services (MedPAC 2019a). This is approximately 15% of the \$413 billion in total Traditional Medicare

(hereafter, "Medicare") spending in 2018 (Boards of Trustees for Medicare 2019) and about 5% more than the much-studied Medicare Part D program spending on Traditional Medicare beneficiaries (MedPAC 2019a). Medicare spending on post-acute care grew one percentage point faster per year than overall Medicare spending between 2001 and 2017, and more than doubled over this period (Boards of Trustees for Medicare 2002, 2018; MedPAC 2016, 2019a). A recent Institute of Medicine report found that, despite accounting for only 16% of Medicare spending, post-acute care contributed to a striking 73% of the unexplained geographic variation in Medicare spending (IOM 2013), suggesting that there may be inefficiency in the sector.

Figure 1: LTCH Facilities Over Time



Note: Figure 1 is based on analysis by Einav, Finkelstein, and Mahoney (2018). Data for this figure come from the Provider of Service (POS) File from 1984–1998 and the MedPAR data from 1998–2014. Figure 1 only includes LTCHs that appear in the MedPAR data.

LTCHs are not clinically distinct from other types of post-acute care providers. Instead, they are an administrative concept, born out of legislation in the early 1980s designed to protect 40 chronic disease hospitals from the new Medicare Prospective Payment System introduced in 1983. There is no analogous type of care provider in other industrialized countries.

Since 1982, there has been rapid growth in the LTCH sector. In 2017, LTCHs accounted for about 4% of discharges to facility-based post-acute care facilities and about 11% of facility-based post-acute care spending (MedPAC 2019a). Despite attempts to rein in the sector, the LTCH industry, which started as a legislative carve-out, expanded from 40 facilities to over 400 by 2014, and in 2017 accounted for \$4.5 billion in annual Medicare spending (MedPAC 2019b; see Figure 1). The vast majority of LTCHs are for-profit facilities.

Spending and Patient Outcomes at Long-Term Care Hospitals

LTCHs are a particularly expensive location to receive post-acute care but deliver no measurable benefits to patients. To estimate the impact of LTCHs on Medicare spending and patient outcomes, researchers examined how patients' care patterns change when an LTCH enters a market (Einav et al. 2018). When an LTCH first opens in a market there is, not surprisingly, a marked increase in the rate of patients being discharged from an acute care hospital to an LTCH. The research estimates that this discharge to an LTCH increases net Medicare spending by about \$30,000. This increase, the researchers find, is because care in LTCHs mostly substitutes for care that would—in the absence of an available LTCH—be delivered by an SNF; these are the most common forms of facility-based post-acute care and are reimbursed approximately \$1,000 less per day to SNFs than LTCHs by the Medicare program.

In addition, discharge to LTCHs reduces average length of stay in the originating acute care hospital by over eight days (Einav et al. 2018). This suggests that LTCHs, in some cases, provide care to patients that cannot (at least initially) be provided by SNFs. However, since acute care hospitals are paid a lump sum per patient that is (largely) independent of length of stay, the reduction in length of stay does not result in any savings to Medicare.

Despite dramatically higher spending from being discharged to an LTCH, there is no evidence of benefits to patients. Patients discharged to an LTCH owe more money out of pocket, and they do not spend any less time in institutional care or experience lower mortality. These results hold not only on average, but also when examining the subset of patients who are sickest or most likely to be discharged to LTCHs. This suggests that, in most cases, patients who are discharged to LTCHs can fare just as well through some combination of longer stays in acute care hospitals and discharge to an SNF instead. Taken together, these findings indicate that Medicare could save roughly \$3.85 billion per year (based on 2017 spending) with no measurable harm to patients by not allowing for discharge to LTCHs (Einav et al. 2019).

Policy Recommendation

The policy response to address this inefficiency is straightforward: policy makers should eliminate the administratively created concept of LTCHs as institutions with their own reimbursement schedule—and reimburse them instead like SNFs.

Calculating Potential Savings

The policy recommendation would save \$3.85 billion in Medicare spending per year—relative to \$4.5 billion in 2017 total LTCH spending (MedPAC 2016, 2019b)—with no measurable harm to patients. The savings would come primarily from the lower Medicare reimbursement rates for SNFs—where most patients who are currently discharged to LTCHs would otherwise go. In addition to saving \$3.85 billion in Medicare spending per year with no harm to patients, eliminating LTCHs would reduce by 10% the unexplained geographic variation in Medicare spending.

References

Boards of Trustees for Medicare. 2002. "The 2002 Annual Report of the Boards of Trustees of the Federal Hospital Insurance Trust Fund and the Federal Supplementary Medical Insurance Trust Fund." *Centers for Medicare and Medicaid Services*.

Boards of Trustees for Medicare. 2018. "The 2018 Annual Report of the Boards of Trustees of the Federal Hospital Insurance Trust Fund and the Federal Supplementary Medical Insurance Trust Fund." *Centers for Medicare and Medicaid Services*.

Boards of Trustees for Medicare. 2019. "The 2019 Annual Report of the Boards of Trustees of the Federal Hospital Insurance Trust Fund and the Federal Supplementary Medical Insurance Trust Fund." *Centers for Medicare and Medicaid Services*.

Einav, Liran, Amy Finkelstein, and Neale Mahoney. 2018. "Provider Incentives and Healthcare Costs: Evidence from Long-Term Care Hospitals." *Econometrica*, 86 (6): 2161-2219.

Einav, Liran, Amy Finkelstein, and Neale Mahoney. 2019. "Long-Term Care Hospitals: A Case Study in Waste." *NBER Working Paper* No. 24946.

IOM. 2013. "Variation in Health Care Spending: Target Decision Making, not Geography." *National Academies Press*.

MedPAC. 2016. "A Data Book: Health Care Spending and the Medicare Program." *Medicare Payment Advisory Commission*.

MedPAC. 2019a. "A Data Book: Health Care Spending and the Medicare Program." *Medicare Payment Advisory Commission*.

MedPAC. 2019b. "Chapter 11: Long-term Care Hospital Services." *Medicare Payment Advisory Commission*.