The Dartmouth Atlas of Health Care 2018 Data Update

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The Dartmouth Atlas of Health Care: 2018 Data Update, published in 2021 using 2018 Medicare claims, examines geographic variation in spending, end-of-life care, hospital use, readmissions, primary care, and selected preventive services. The original review correctly connects the report with Affordable Care Act goals involving coverage, quality, prevention, and lower costs, but it makes contradictory claims about New Jersey. It states that the state spends less per resident than the national average and also ranks first in per-capita spending, then treats lower spending, higher admissions, and greater emergency use as evidence of both efficiency and failure. Those conclusions cannot be drawn without specifying the population, measure, geographic unit, price adjustment, and outcome. The Atlas is primarily a study of fee-for-service Medicare enrollees and hospital referral regions, not every New Jersey resident or the entire state healthcare system. Its value lies in revealing variation and generating questions. It does not automatically prove that higher use is better, lower spending is efficient, or the ACA caused every change observed between 2011 and 2018. (Dartmouth Atlas Project, 2026)

What the Dartmouth Atlas Measures

The Dartmouth Atlas uses Medicare administrative data to examine how healthcare resources are distributed and used across geographic areas and institutions. A hospital referral region, or HRR, represents a market for major cardiovascular and neurosurgical procedures and may cross state boundaries. The Atlas also reports at hospital service area and hospital levels for some measures. These geographies are more informative than state averages for many clinical questions because healthcare is locally organized. A resident of northern New Jersey may receive specialized care within a New York metropolitan network, while southern New Jersey patterns may differ. Treating New Jersey as one uniform system hides such variation.

The Population Included in the 2018 Update

The update focuses heavily on fee-for-service Medicare, especially older adults and chronically ill beneficiaries near the end of life. It does not represent Medicare Advantage claims comprehensively, younger adults with employer insurance, Medicaid populations, or uninsured residents. A finding about Medicare reimbursement per enrollee should therefore not be called “healthcare spending per resident.” The distinction matters because populations differ in age, illness, coverage, provider network, and payment rules. Policymakers can learn from Medicare patterns, but they should

combine Atlas data with state all-payer databases, Medicaid information, commercial claims, public-health indicators, and patient-reported outcomes before making statewide conclusions.

The ACA Context

The report begins by noting that the period after 2010 included major healthcare reforms. The ACA expanded insurance through Marketplaces and Medicaid in participating states, strengthened consumer protections, created the Center for Medicare and Medicaid Innovation, and introduced or accelerated programs concerning readmissions, accountable care, preventive services, and payment reform. However, many Medicare beneficiaries already had coverage before the ACA. The law's effects on this population were more likely to appear through delivery-system incentives, cost sharing for preventive services, readmission penalties, and organizational change than through new insurance enrollment. The Atlas describes trends during the reform era; it is not a controlled evaluation proving that one law caused them.

National Medicare Spending Trends

After adjustment for inflation, national fee-for-service Medicare reimbursements excluding Part D were relatively stable between 2011 and 2018. The report gives an average of $10,936 per enrollee in 2011, expressed in 2018 dollars, and $10,786 in 2018. Variation among 306 HRRs decreased somewhat, largely because some of the highest-spending regions declined. Even so, substantial geographic differences remained after adjustments for age, sex, race, and regional prices. This result supports the Atlas's longstanding argument that illness and prices do not explain all variation. Local practice patterns, capacity, referral networks, organizational culture, and treatment intensity also matter.

Why Lower Spending Is Not Automatically Better

Lower spending can reflect efficient prevention, coordinated outpatient care, reduced low-value treatment, lower prices, or healthier patients. It can also reflect inadequate access, undertreatment, clinician shortages, transportation barriers, or exclusion. A spending measure becomes meaningful only when examined with quality, outcomes, equity, and patient experience. If a region spends less but has preventable mortality, poor chronic-disease control, or unmet need, low cost is not success. Conversely, high spending may reflect complex referral populations or necessary specialized treatment, though unexplained intensity can indicate inefficiency. The original review's attempt to label New Jersey efficient or failing from a few utilization indicators is therefore premature.

Shift from Inpatient to Outpatient Spending

Between 2011 and 2018, the share of Medicare reimbursement devoted to hospitals and skilled nursing facilities for inpatient care declined from 48 percent to 42 percent, while outpatient facility reimbursement increased from 12 percent to 19 percent. This may reflect efforts to avoid preventable hospitalization and deliver treatment in less expensive settings, but the shift also raises questions. Outpatient care is not always cheaper for patients, and facility fees can increase costs. More outpatient services may indicate improved access or simply movement of billing locations. Researchers need to evaluate total episodes and outcomes rather than assuming that a change in site is inherently efficient.

Hospice and End-of-Life Care

Hospice use among chronically ill Medicare decedents increased from 49 percent in 2011 to 56 percent in 2018, while average hospice days rose from roughly 22 to 26. Greater hospice use can support comfort, symptom management, family support, and alignment with patient goals when enrollment is timely and informed. It should not be treated as an automatic cost-saving measure or as evidence that every patient received preferred care. Very late enrollment may provide limited benefit, and regional access varies. Quality evaluation should include advance care planning, patient preferences, symptom burden, continuity, and family experience.

Declining Hospital Use Near the End of Life

The proportion of chronically ill Medicare patients dying in a hospital decreased from 24.1 percent in 2011 to 20.4 percent in 2018. Average inpatient days during the last six months of life fell from 9.8 to 8.5, while intensive-care days changed less. These national trends may suggest a shift away from hospital-centered end-of-life care. Yet regional and hospital variation remained large. Some patients need hospital or intensive care because of acute, treatable complications; others receive burdensome interventions inconsistent with their goals. Claims data show where services occurred, not whether decisions were appropriate or preferred.

New Jersey’s High-Intensity Hospital Examples

The report identifies several New Jersey hospitals with relatively high intensive-care use among chronically ill patients near death. Patients receiving most of their inpatient care at Kennedy University Hospital in Stratford and Robert Wood Johnson University Hospital in New Brunswick averaged about 10.4 intensive-care days during their last six months, while Riverview Medical Center in Red Bank averaged approximately 10.0. These are hospital-level observations for a defined Medicare decedent population, not a ranking of all New Jersey care. Tertiary referral, illness mix, local

supply, clinician practice, patient preferences, and coordination may contribute. The findings justify investigation, not immediate condemnation.

Many Physicians and the Coordination Challenge

Nationally, the average number of physician visits among chronically ill decedents decreased, but the number of different physicians involved increased from about ten to about twelve. The proportion seeing at least ten different physicians rose from 43.2 percent to 51.2 percent. Several New Jersey HRRs were among the highest: Paterson at 67.6 percent, Ridgewood at 66.8 percent, and New Brunswick at 66.6 percent. Specialist involvement may be necessary for complex illness, but numerous clinicians can create fragmented communication, duplicated tests, contradictory treatment, medication risk, and unclear accountability. The measure therefore raises a care-coordination question rather than proving excessive care in every case.

Readmission Trends

Thirty-day readmission after any medical discharge declined modestly from 15.9 percent to 15.1 percent between 2011 and 2018. Larger reductions occurred for conditions targeted by the Hospital Readmissions Reduction Program, including heart failure, acute myocardial infarction, and pneumonia. Readmission rates are useful because a preventable return can signal poor discharge planning, medication problems, inadequate follow-up, or weak community support. However, not all readmissions are preventable, and aggressive avoidance can create observation stays or delayed necessary care. Social risk and access after discharge also influence outcomes. Hospitals should interpret readmission data with patient characteristics and local service capacity. (Centers for Medicare & Medicaid Services, 2026)

Primary Care Use

The percentage of Medicare enrollees with at least one ambulatory primary-care visit increased slightly, from about 78 percent in 2011 to 80 percent in 2018. The original review states that New Jersey had lower primary-care visits and higher specialty visits but does not identify the relevant HRR or data. The report’s New Jersey finding most clearly concerns multiple different physicians near the end of life, not a simple statewide primary-versus-specialty comparison. Policymakers should use the Atlas data tables to identify exact areas before proposing statewide physician recruitment. Primary-care investment remains reasonable, but the diagnosis must match the evidence.

Preventive Services

The Atlas examined diabetes testing and mammography within defined Medicare age groups. National changes were small, while regional variation remained substantial. Screening rates are process measures: they indicate whether recommended services were recorded, but they do not capture follow-up quality, informed choice, overdiagnosis, access barriers, or outcomes completely. A region should not pursue a higher percentage mechanically without considering current clinical guidance and patient eligibility. The data are most useful for identifying unexplained gaps and targeting quality-improvement review.

Hospital Referral Regions Versus Political Boundaries

Health policy is often organized by state and county, while patients move through referral markets that cross those borders. This creates a challenge for New Jersey. Some residents use New York or Philadelphia systems, and providers serve patients from multiple states. State regulators can influence insurance, licensure, Medicaid, public health, and facility planning, but they do not control every regional pattern. Collaborative planning across boundaries may be necessary for specialty access, emergency preparedness, data sharing, and end-of-life care.

Price Adjustment and Utilization

The Atlas often adjusts reimbursement for regional price differences and demographic characteristics so that remaining variation better reflects service volume and intensity. Users must confirm which adjustment applies before comparing places. Unadjusted spending may be high because wages and input costs are high; price-adjusted spending may reveal whether more services are delivered. The original essay shifts between “cost,” “expense,” and “use” without keeping them separate. A strong analysis labels the numerator, denominator, population, year, and adjustment for every claim.

What the Data Cannot Tell Us

Claims data are created for payment, not to capture every clinical reason, patient preference, social need, or outcome. Diagnostic coding varies, and Medicare Advantage enrollment can change the composition of the fee-for-service population. The report itself advises caution about apparent changes in some primary-care and screening measures because alternative payment models can change how visits appear in claims. Observational geographic differences also do not prove that greater supply causes more use in every instance. The Atlas identifies patterns requiring explanation; additional research is needed to establish causal mechanisms.

Using the Data for New Jersey Policy

New Jersey policymakers can use the report to focus investigation on coordination and high-intensity end-of-life care. Hospitals and accountable care organizations could review whether patients have documented goals, timely palliative-care access, shared medication records, and a clinician responsible for coordinating across specialists. Comparative dashboards can identify outliers, but institutions should validate data and involve clinicians and patients before imposing targets. Payment reform can reward coordination and quality, while community-based services can make home care feasible. The objective should not be lower utilization at any cost; it should be care that is necessary, evidence-based, equitable, and aligned with patient preferences.

Improving Public Interpretation

Healthcare profiles should avoid advertising a state as “low-cost and high-quality” based on one measure. Public communication should describe what population the data cover, explain uncertainty, and present spending beside outcomes. Maps are visually persuasive but can conceal variation within an HRR or hospital. Users should compare multiple years and examine absolute differences, not only ranks. A region can move in rank because other regions change even when its own performance remains stable. The report’s purpose is learning and accountability, not competitive branding alone.

The Atlas’s Broader Contribution

The Dartmouth Atlas established that where a person lives can strongly influence the amount and type of care received. This insight challenged the assumption that clinical need alone determines utilization. The 2018 update shows some national improvement—stable inflation-adjusted spending, reduced hospital use near the end of life, modestly lower readmissions, and slight gains in preventive and primary care—while persistent geographic variation remained. The Atlas website now preserves historical rates through 2019 rather than producing new annual calculations, but its methodological contribution continues in health-services research.

Conclusion

The 2018 Dartmouth Atlas update is a valuable historical assessment of Medicare spending and utilization, but it does not support simple conclusions that New Jersey’s healthcare system is either efficient or failing. The report studies specific fee-for-service Medicare populations across HRRs and hospitals, not all state residents. New Jersey appears prominently in findings concerning the number of physicians involved in end-of-life care and intensive-care days at selected hospitals. Those patterns raise concerns about coordination and treatment intensity, yet they require clinical and local investigation. The best policy use is to combine Atlas measures with outcomes, patient preferences,

all-payer data, equity indicators, and organizational evidence. Variation is a signal to ask better questions, not a verdict by itself. (Bronner et al., 2021)

References

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