ASTRELIS

NATIONAL STUDY · SNF · EDITION 2026

NATIONAL HEALTHCARE DATASET

Ground Truth

Where Public SNF Benchmarks Break

Matt Borchardt, Founder, Astrelis

Fiscal anchor: FY2024

Universe: 13,970 facilities

Published 2026-07-14

THE 2026 NATIONAL SKILLED NURSING STUDY

Six ways a correct filing produces a wrong conclusion

A public SNF filing can be completed exactly as instructed and still hand management the wrong conclusion.

> A form filled out exactly as instructed can still hand you the wrong conclusion.

Across 13,970 facilities on FY2024 federal cost reports, we found six recurring reasons: fee-for-service Medicare is 7.3 percent of the median facility's days; peer selection materially reverses staffing verdicts for 26 percent; the overall star rating is insensitive to billions of dollars of delivered staffing; survey performance can cap the return on a staffing star before a dollar is spent; the legacy Medicaid field omits managed care days; and the two federal staffing systems can describe the same building's labor differently.

Nothing in this study requires a single filing to be wrong. The table below is the whole argument. The pages that follow are the proof, one finding at a time.

SIX FINDINGS AT A GLANCE

FY2024 cost report anchor. Care Compare and PBJ through June 2026. n=13,970.

FINDING	THE NATIONAL RESULT	THE QUESTION FOR ONE BUILDING
1. Payer definition	7.3% FFS Medicare at the median	Is your benchmark measuring your actual business?
2. Peer sensitivity	26.0% material flip on staffing	Would your verdict survive a different cohort?
3. Rating resolution	$16.0B to $19.3B unregistered	Is your staffing invisible to your overall rating?
4. Rating composition	2,545 facilities survey-capped	Would staffing dollars actually move your rating?
5. Legacy Medicaid field	Managed Medicaid booked as Other	Is your public payer mix complete?
6. Labor sourcing seam	96 of 97 inside one chain	Do the two federal systems agree about your labor?

Full methodology, sensitivity tests, and state tables: astrelis.co/studies/skilled-nursing/2026/methods/

The benchmark may be measuring the wrong business

1 THE WRONG PAYER

VERIFIED

The industry benchmarks fee-for-service Medicare. It is 7.3 percent of the days.

> The median facility draws 7.3 percent of its resident-days from fee-for-service Medicare and 62.7 percent from reported Medicaid.

> The industry measures the thing with the good documentation and calls it a benchmark.

Medicare is the payer with a cost report worksheet, a per diem, a case-mix model, and a public dataset, so it is the payer the industry learned to measure. But it is 7.3 percent of the median facility's days, and 20.1 percent even at the ninetieth percentile. Two thirds of nursing homes draw under ten percent of their days from the payer their benchmarks describe best.

And the 62.7 percent reported Medicaid figure is a floor, not a measurement. Finding 5 explains why.

WHAT A NURSING HOME ACTUALLY IS, BY RESIDENT-DAY

HCRIS Worksheet S-3, FY2024 anchor. n=13,970.

PAYER	P10	MEDIAN	P90
Medicare fee-for-service	2.4%	7.3%	20.1%
Reported Medicaid (Title XIX FFS only)		62.7%	
Private and other, including managed Medicaid		27.3%	

Reported Medicaid is a floor, not a measurement. See Finding 5.

Method. HCRIS Worksheet S-3, n=13,970. MedPAC independently reports 8 percent by a different method.

2 THE WRONG PEERS

MODELED

26 percent of nursing homes get the opposite staffing verdict, depending on the comparison group

> Change the comparison group and the staffing verdict reverses for 26.0 percent of facilities, crossing the median and moving at least ten percentile points.

> A verdict that reverses on a methodological choice was never a fact about your building.

We ran every facility twice: against its census region, the way published reports do it, and against a cohort matched on rurality, size, acuity, ownership, and payer mix. Total nurse hours, the number an operator actually manages, materially reverses for 26.0 percent. Across all six core metrics, 63.6 percent flip on at least one; the 26.0 is the staffing-only, materiality-filtered figure.

The error has no direction. The region flatters as many readings as it condemns, so it cannot be corrected from inside. Neither comparison is the truth. The point is that the answer changes with the comparison, and nobody tells you it changed.

VERDICTS THAT REVERSE: CENSUS REGION VERSUS MATCHED COHORT

FY2024 anchor, n=13,365. Material flip: crosses the cohort median and shifts at least 10 percentile points.

METRIC	MATERIAL FLIP RATE
Total nurse hours per resident-day	26.0%
Non-nursing operating cost per day	19.5%
Occupancy	13.8%
Nursing cost per day (wage-standardized)	12.8%
Operating margin	8.4%
Nursing turnover	8.0%

63.6 percent of facilities flip on at least one metric at the median tier. The error is symmetric: the region flatters as many readings as it condemns.

Method. Five-dimension match, minimum 15 peers, n=13,365. All four materiality tiers in the appendix.

The overall rating has two staffing blind spots

3 BLIND SPOT ONE: RESOLUTION

MODELED

The overall star rating is insensitive to 16 billion dollars of nursing care

> Nursing homes deliver 16.0 to 19.3 billion dollars a year of staffing that their overall star rating does not register.

> It is not a savings opportunity. It is a measurement of the resolution of the instrument.

For every facility we computed the least staffing it could carry and still hold its current overall rating, then priced everything above that floor at the facility's own wages. The answer is 16.0 to 19.3 billion dollars a year of delivered care the overall composite cannot register. The staffing star may still move. The number on the front of Care Compare does not.

This is a measurement of the instrument's resolution, not a savings opportunity. And it cuts both ways: 582 facilities are staffed thinner than their own rating's floor.

STAFFING THE OVERALL RATING DOES NOT REGISTER

Hold floor preserves each facility's current overall rating. Priced at reported wages.

BASIS	FACILITIES	ANNUAL VALUE
Pure rating math	11,874	$16.0B to $19.3B
At the rescinded federal minimums	4,743	$2.2B to $2.8B
Staffed below their own rating's floor	582	

A measurement of instrument resolution, not a recommendation.

Method. Scorer reproduces published overall ratings at 100 percent, staffing stars at 93.8 percent. Sensitivity at the rescinded minimums: 2.2 to 2.8 billion.

4 BLIND SPOT TWO: COMPOSITION

MODELED

A staffing star costs $485,511 a year. For 2,545 facilities it cannot move the rating.

> The next staffing star costs $485,511 a year at the median. For 2,545 facilities, a perfect staffing score would not move the overall rating at all.

> You can buy a perfect staffing score and watch your overall rating sit exactly where it was.

The next staffing star costs $485,511 a year at the median, or $17.48 per resident-day. But the overall rating is not an average of its parts: the health inspection sets the base, and staffing can only carry a facility so far off it.

For 2,545 facilities the survey is the binding constraint, and a perfect staffing score would move the overall rating by nothing. That is 3.31 billion dollars available to be spent for zero movement. Before funding a staffing star, test whether the survey is the ceiling.

THE PRICE OF A STAFFING STAR

Cohort staffing ladder at reported wages, exact scorer reproduction only (13,075 facilities).

	RESULT
Next staffing star, median annual cost	$485,511 ($17.48 per resident-day)
Fifth staffing star, median annual cost	$1,101,243
Survey-capped: overall rating would not move	2,545 facilities · $3.31B for zero movement

The health inspection sets the base. Staffing can only carry an overall rating so far off it.

Method. Cohort staffing ladder at reported wages, restricted to the 13,075 facilities with exact scorer reproduction.

The public record can describe the same building more than one way

5 THE LEGACY MEDICAID FIELD

VERIFIED

The legacy Medicaid column does not contain Medicaid

> Nineteen of Vermont's thirty-two nursing homes file exactly zero Medicaid days. They are full of Medicaid residents.

> The days did not disappear. They were reclassified by a form.

The legacy cost report's Medicaid column captures Title XIX fee-for-service only. Managed care days land in Other, the bucket routinely read as private pay. Vermont runs long-term care through managed Medicaid, so its median facility reports 0.0 percent Medicaid. California reports 7.2 percent. Both are filing exactly as instructed.

Every payer comparison built on that column understates Medicaid in the states that moved to managed care, which is most of them. CMS revised the form effective for periods ending on or after September 30, 2025. The historical record that every current benchmark runs on is not revised.

WHERE THE MEDICAID DAYS WENT CMS-2540 Worksheet S-3, FY2024 anchor. All values real; none suppressed or imputed.

	REPORTED MEDICAID (MEDIAN)	OTHER (MEDIAN)	FACILITIES
Vermont	0.0%	82.4%	32
California	7.2%	69.3%	1,012
National	62.7%	27.3%	13,970

Worksheet S-3 books fee-for-service Medicaid only. CMS Transmittal 1-Revised fixes this prospectively for periods ending on or after 2025-09-30.

Method. CMS-2540 Worksheet S-3; all values real, none suppressed or imputed. Form 2540-24, Transmittal 1-Revised, 2024-11-27.

6 THE LABOR SOURCING SEAM

CALCULATION CHECKED

Two federal systems describe the same building's labor differently, and the pattern tracks the owner

> In one national chain, 96 of 97 facilities show the same disagreement between the two federal staffing systems. In another, 121 of 132. Elsewhere, near zero.

> One system says this building buys almost no labor. The other says it is paying for a great deal of it.

Nursing homes report labor twice: daily hours to the Payroll-Based Journal, annual dollars to the Medicare cost report. The two are rarely reconciled in public analysis. Placed side by side, roughly a third of facilities show one system reporting almost no contract labor while the other records material purchased nursing services.

The pattern tracks the parent organization, not the building: 96 of 97 in one chain, 121 of 132 in another, near zero elsewhere. Central employment and purchased services can produce it legitimately, and nothing here establishes improper reporting. It does mean a labor benchmark against those peers is partly measuring corporate structure rather than performance.

THE LABOR SOURCING SEAM, BY PARENT ORGANIZATION PBJ contract hours against cost report purchased nursing services. Period alignment partial; see appendix.

CHAIN, RANKED BY SEAM RATE	FACILITIES WITH THE SEAM	RATE
Largest	96 of 97	99.0%
Second	121 of 132	91.7%
Third	119 of 192	62.0%
Fourth	205 of 335	61.2%
Fifth	88 of 278	31.7%
National, at published thresholds		roughly one third

Central employment by a parent can produce this pattern legitimately. Public data cannot distinguish that from other explanations. A question, not an accusation.

Method. Period alignment partial; rate runs 23.7 to 47.9 percent across the threshold grid. Full alignment work and the reverse seam in the appendix. A question, not an accusation.

TAKE THIS TO YOUR NEXT MEETING

Five questions to ask before accepting any benchmark

> A benchmark that cannot answer these five questions is not wrong. It is unfinished.

One. Does the payer definition include managed care?

Two. Would the conclusion survive a different reasonable cohort?

Three. Would the staffing investment move the staffing star, the overall rating, both, or neither?

Four. Do the two federal staffing systems tell the same labor story?

Five. Has the finding survived a null model?

THE STANDARD THIS STUDY IS HELD TO

How this was built

13,970 Medicare-certified SNF cost report filers, 91.2 percent anchored on FY2024 filings. Medians and percentiles, never averages. Nothing imputed; real, suppressed, and not-reported values are never flattened into one. No state median published below 75 percent filer coverage. No causal claims.

We tested a seventh finding. It failed its null model, so it is not in this study. The failed test is published in the appendix, with the full methodology, every sensitivity result, the scorer validation, and the state-by-state tables.

Full methodology and technical appendix: https://astrelis.co/studies/skilled-nursing/2026/methods/

WHAT THIS STUDY CANNOT TELL YOU

Where your building sits

National data show where benchmarks fail. The facility report shows where your building sits.

The Astrelis SNF Facility Benchmark Report includes your matched comparison cohorts, dollarized operating signals, the positions worth protecting, staffing and rating scenarios priced against your own survey base, every place your public sources conflict, and the Astrelis Excel Validation Workbook.

Self-guided. No consultation required.

$2,500 per facility.

View a sample report
https://astrelis.co/reports/snf-sample/

Find my facility
https://astrelis.co/providers/snf/