

DOCUMENT

03

A CENTURY OF COSTS.

A 100-year financial sustainability and
break-even study

2025 - 2124 | OCTOBER 28, 2026

THE CENTRAL RESULT

+314.589T

Additional cumulative nominal national spending compared with business as usual. A conditional compounding result - not a forecast.

What changes across 100 years

Five pricing constructions, one all-sponsor national expenditure baseline. These are conditional nominal results relative to business as usual, not verified attainable savings.

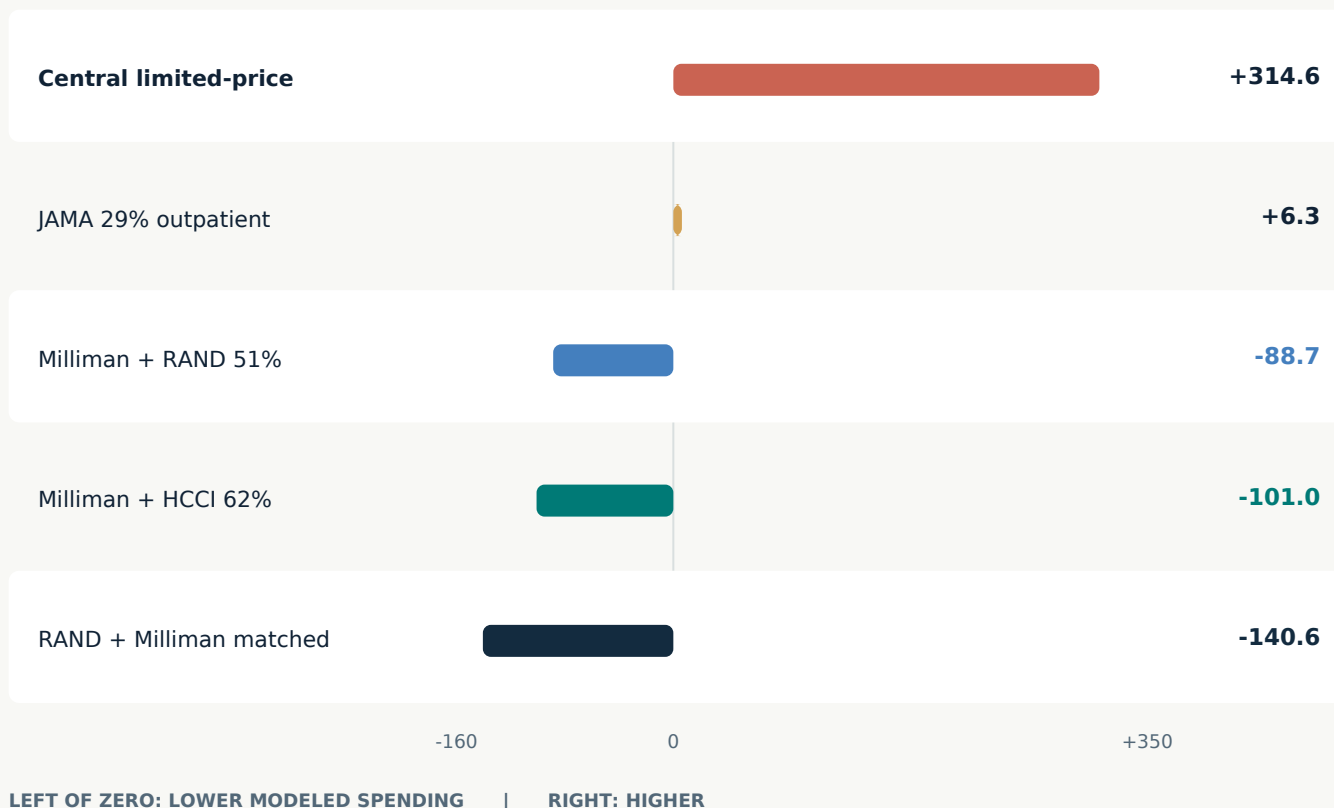
+314.6T

Central 100-year D - A; spending stays higher through 2124.

NONE

Central cumulative crossover through 2124.

100-YEAR FINANCIAL DIFFERENCE | NOMINAL \$ TRILLIONS



Read the sign carefully: the central and JAMA constructions remain above business as usual; three deeper-price mixtures fall below it. None has a certified, national, service-level payment schedule.

Source: companion 100-year workbook; all 2055-2124 inputs are analyst assumptions.

First, reproduce the first 30 years

The original 2025-2054 ledger comes from Document 4. The extension does not replace its exact controls or retroactively alter its rows.

2025-2054 / PRECISE AGGREGATE CONTROLS

SCENARIO	NOMINAL EXPENDITURE (\$T)
A / CURRENT COVERAGE, CURRENT PRICES	347.901098682
B / UNIVERSAL, CURRENT PRICES	369.066292471
C / CURRENT COVERAGE, REGULATED	342.417162859
D / UNIVERSAL, REGULATED	363.582356648
D - A / CENTRAL GAP	+15.681257966

RESEARCH BOUNDARY / 30 YEARS VERIFIED AGAINST PRINTED LEDGER; 70 YEARS CONDITIONAL

2025-2054 ORIGINAL STUDY	2055-2124 NEW ASSUMPTION-BASED STRESS TEST
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Precision boundary. Adding printed six-decimal annual differences gives +15.681255T. The controlling exact aggregate is +15.681257966T; the 0.000002966T residual is visible, not silently distributed into rows.

The source model's annual B0 generator is unavailable. A 30-year aggregate reconciliation is not full independent reproduction of that upstream utilization and deferred-care logic.

What actually changes after 2054

After the modeled coverage rollout and deferred-care queue, annual baseline spending grows at the chosen rate. Every future-year care addition and efficiency credit is a transparent scenario assumption.

THE 2055-2124 CONSTRUCTION

01

BASELINE A

Grow prior-year A by 4% nominal.

02

ADDED CARE

6% recurring care + 1% capacity allowance.

03

PRICE CREDIT

Weighted 2024-equivalent service reduction.

04

ADMIN CREDIT

Weighted assumed net insurer overhead reduction.

REPRODUCIBLE EQUATIONS

A(t)	$1.04 \times A(t-1)$
B0(t)	$A(t) \times (1 + 0.06 + 0.01)$
w(t)	$1000 \times A(t) / 5,278.588$
B / C / D	$B0 - M \quad / \quad A - P \quad / \quad B0 - M - P$

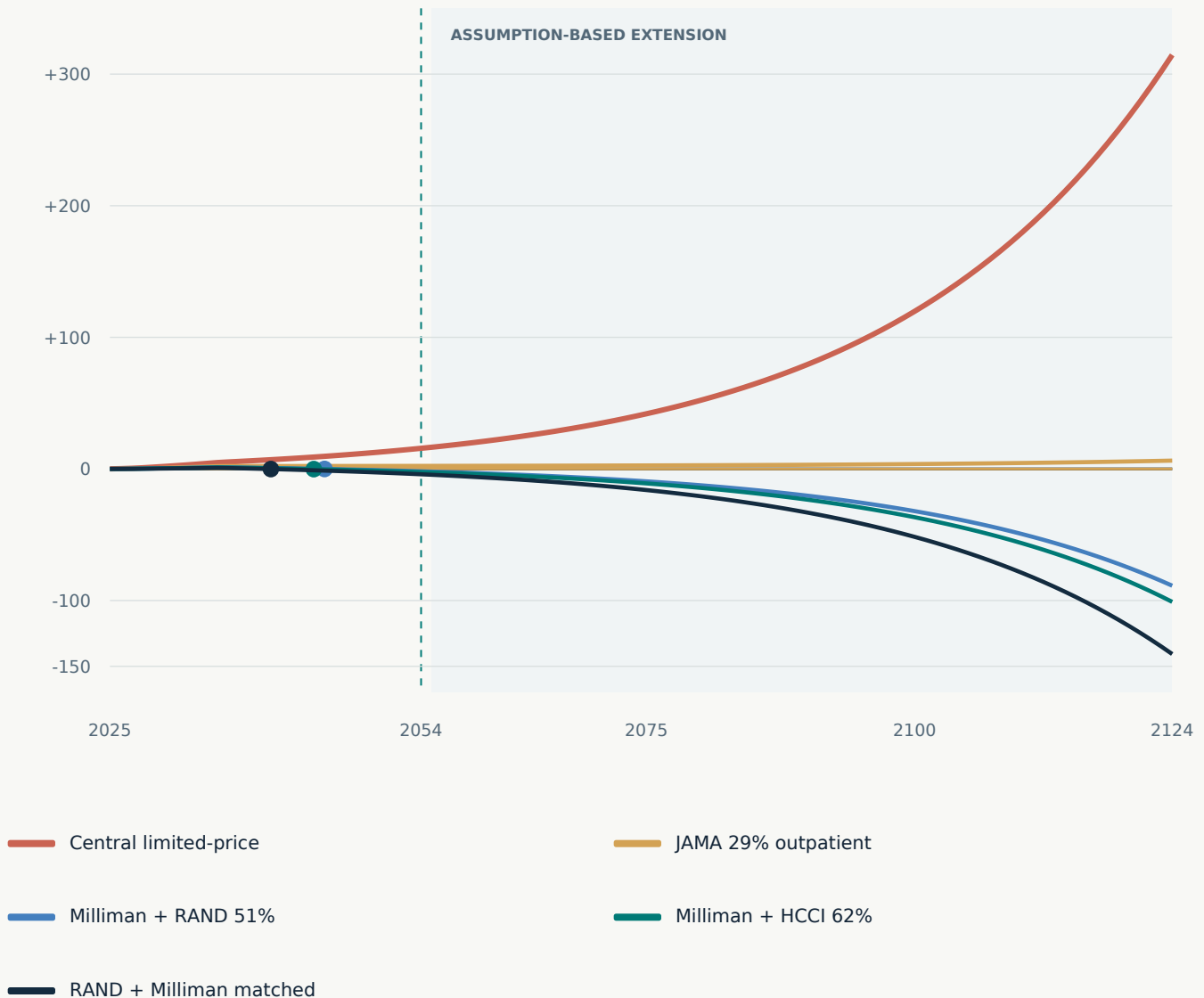
M = w x 70.5832 / 1000; P = w x 86.11297 / 1000; output in \$T.

Central net recurring D - A ~4.0315% of A; B and C shortcuts are not isolated causal effects.

A widening spread - not a forecast

Differences accumulate under fixed mathematical rules. The shaded region marks 2055-2124, for which no official national spending forecast exists.

CUMULATIVE DIFFERENCE D - A / NOMINAL \$ TRILLIONS



What the lines do and do not show: nominal compounding makes distant-dollar amounts extremely sensitive to the assumed growth and payment rules. A negative curve is not a certified clinical or provider-safe efficiency gain.

The sign depends on pricing, not simply time

A longer horizon mechanically amplifies the chosen recurring payment assumptions. These checkpoints make the 30/50/75/100-year arithmetic inspectable alongside the century chart.

CUMULATIVE D - A / NOMINAL \$ TRILLIONS

PRICING BASIS	30Y	50Y	75Y	100Y
Central limited-price	+15.7	+40.1	+115.0	+314.6
JAMA 29% outpatient	+2.3	+2.6	+3.6	+6.3
Milliman + RAND 51%	-1.8	-8.9	-30.7	-88.7
Milliman + HCCI 62%	-2.3	-10.4	-35.1	-101.0
RAND + Milliman matched	-4.1	-15.2	-49.4	-140.6

TWO CONTRASTING LONG-RUN PATHS

CENTRAL LIMITED-PRICE

+15.7T

30 years

+314.6T

100 years

RAND + MILLIMAN MATCHED

-4.1T

30 years

-140.6T

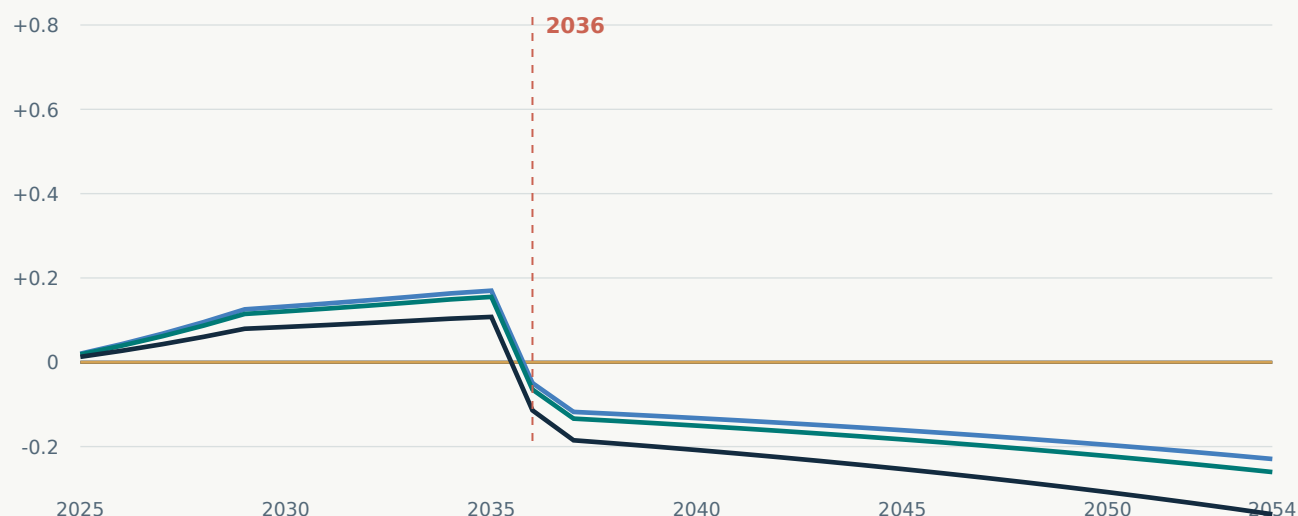
100 years

30-year provenance: these checkpoint figures are reconstructed from printed annual rows and illustrative source ratios. The exact central 30-year aggregate and the deeper-price reconstruction residuals remain separately disclosed in Documents 3 and 4.

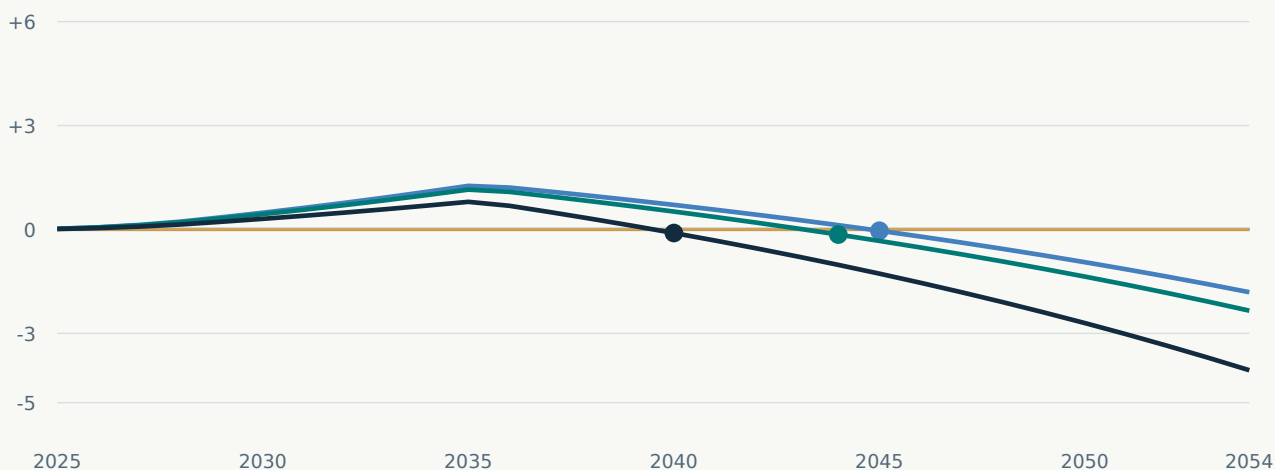
Annual savings are not cumulative payback

All three deeper-price constructions first have lower annual spending in 2036. The accumulated earlier spending increment is not recovered until different later years.

ANNUAL DIFFERENCE / 2025-2054 (\$T PER YEAR)



CUMULATIVE DIFFERENCE / 2025-2054 (\$T TOTAL)



M+RAND

M+HCCI

RAND MATCHED

Payback: 2045**Payback: 2044****Payback: 2040**

The 2036 change is associated with the original model's assumed deferred-care backlog clearing. It is a modeled ledger event, not evidence that real appointment queues disappear.

Demand assumptions can reverse savings

Higher access does not automatically yield more total spending, but the extent of additional paid care is consequential. These scenarios vary the post-2054 allowance only.

100-YEAR D - A UNDER POST-2054 ADDED PAID CARE / NOMINAL \$T

	CENTRAL	JAMA MIX	M+RAND	M+HCCI	RAND MATCHED
3% EXTRA CARE	+92 HIGHER	-216 LOWER	-311 LOWER	-323 LOWER	-363 LOWER
6% EXTRA CARE	+315 HIGHER	+6 HIGHER	-89 LOWER	-101 LOWER	-141 LOWER
12% EXTRA CARE	+759 HIGHER	+451 HIGHER	+356 HIGHER	+344 HIGHER	+304 HIGHER
18% EXTRA CARE	+1,204 HIGHER	+896 HIGHER	+801 HIGHER	+789 HIGHER	+749 HIGHER

12%

Additional care stress: every deep-price case turns positive.

6%

Central recurring care assumption after the original horizon.

Cells are modeled differences, not observed utilization elasticities. A lower-cost row must never be interpreted as evidence that withholding medically necessary care is acceptable.

A century magnifies small rate changes

One percentage point around the 4% post-2054 nominal growth baseline moves cumulative nominal differences by large amounts. The signs of the two displayed pricing cases do not flip in this test.

100-YEAR DIFFERENCE BY FUTURE NOMINAL GROWTH / \$T



With the assumed 4% growth, Scenario A reaches \$304.737T of annual nominal spending in 2124. There is no validated century-long GDP, age, technology, labor or service-cost forecast behind this extrapolation.

Payment savings are conditional

A single public payer does not erase claims administration. Lower hospital payment rates may create service-loss risks without validated facility costs and support.

NET INSURER NONMEDICAL ADMIN REDUCTION AFTER 2054

ASSUMED REDUCTION	CENTRAL (\$T)	M + RAND (\$T)
0%	+413.7	+10.4
20%	+364.2	-39.1
40%	+314.6	-88.7
60%	+265.0	-138.3

POST-2054 DEEP-PRICE PROVIDER SUPPORT / BASE-YEAR \$B PER YEAR

ASSUMED SUPPORT	JAMA (\$T)	RAND MATCHED (\$T)
\$0B	-28.8	-175.8
\$25B	+6.3	-140.6
\$50B	+41.4	-105.5

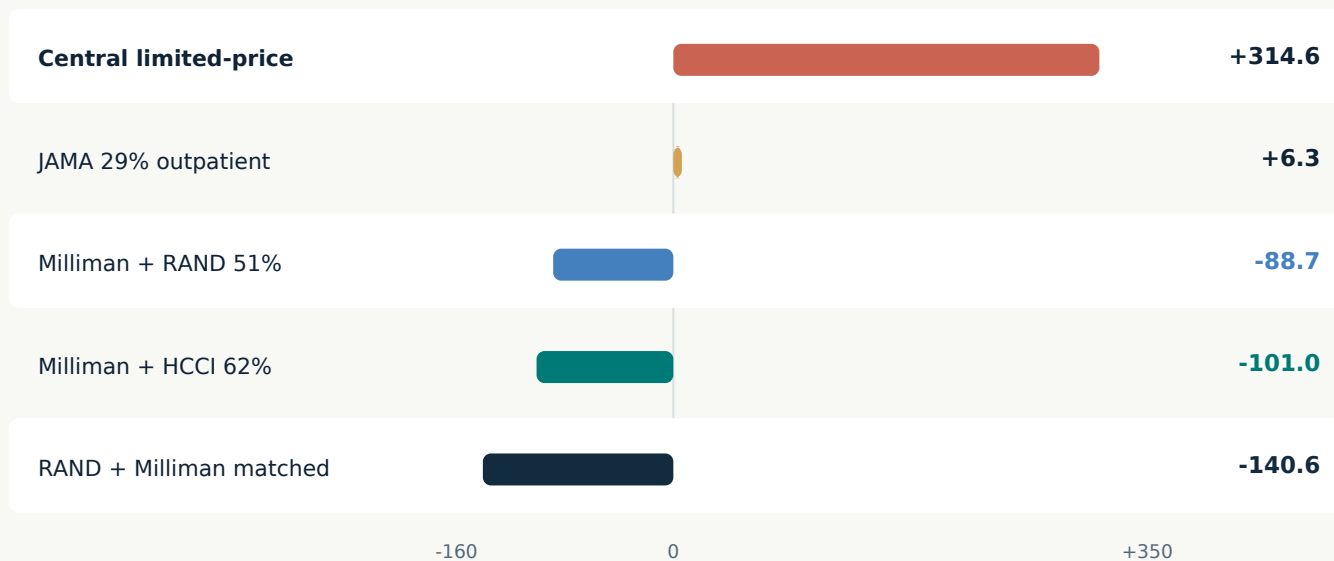
NOT AN ACHIEVABILITY TEST

The \$25B annual support allowance and deeper Medicare-relative tariff assumptions are illustrative. No service-level national cost reconciliation, rural safety-net operating protection or staffed capacity has been certified.

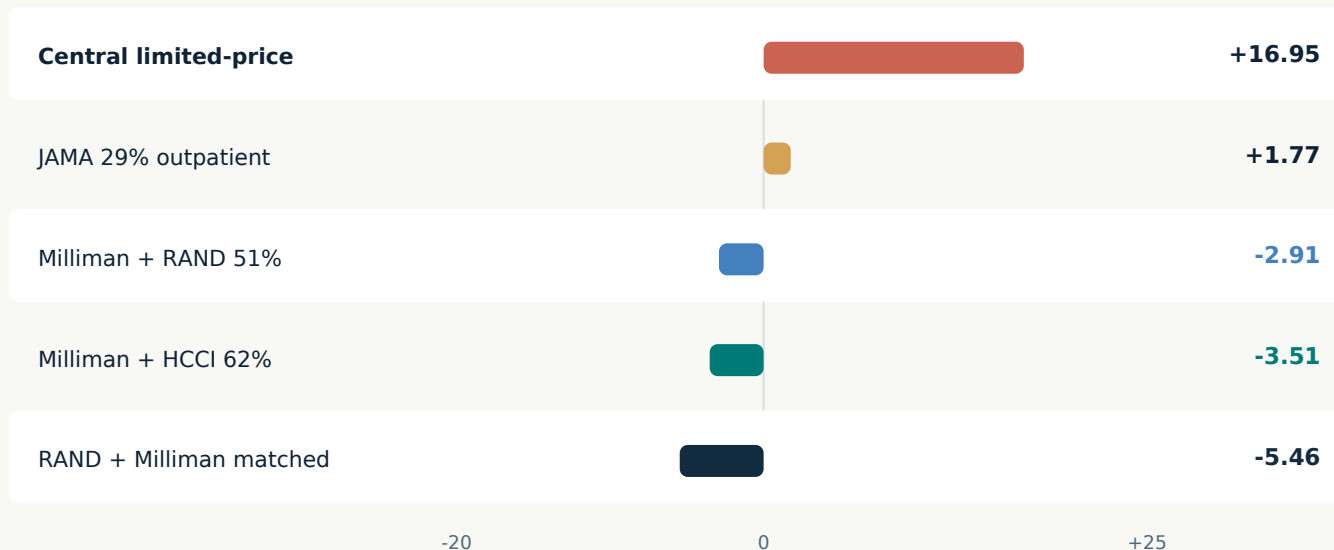
Nominal and present value tell different stories

All 100-year cumulative differences below share a 2025 base year. Present values apply 2% annual inflation and a 3% real discount rate, not a forecast of long-run prices.

NOMINAL 2025-2124 / 100-YEAR \$T



DISCOUNTED TO 2025 / PRESENT-VALUE \$T



A dollar counted in 2124 is not equivalent to a dollar in 2025. Discounting reduces century-scale nominal magnitudes but cannot establish clinical QALYs, household protection or a net welfare gain.

The sensitivity limits are conditional identities

Break-even extra-care percentages are not clinically permissible care limits. Real discount choices alter present value, but do not validate the century-long fiscal or welfare assumptions.

BREAK-EVEN RECURRING ADDITIONAL PAID CARE / AFTER 2054

PRICING CONSTRUCTION	MAXIMUM EXTRA-CARE SHARE
Central limited-price	1.97%
JAMA 29% outpatient	5.95%
Milliman + RAND 51%	7.17%
Milliman + HCCI 62%	7.33%
RAND + Milliman matched	7.84%

The 1% incremental-capacity allowance is held constant. A lower break-even percentage does not measure unmet need or prove that medically necessary services can be restricted.

REAL DISCOUNT RATE SENSITIVITY / 2% INFLATION RETAINED

REAL DISCOUNT	CENTRAL PV (\$T)	RAND MATCHED PV (\$T)
1%	+43.11	-17.13
3%	+16.95	-5.46
5%	+9.10	-2.12

Under 2% inflation and 3% real discounting, the 2025 present-value central 100-year gap is +\$16.952T; matched-price illustration -\$5.465T. Neither outcome incorporates measured population QALYs.

What these results cannot certify

The proposal asks whether a coherent universal coverage architecture warrants investigation. It does not claim to solve all U.S. healthcare problems or demonstrate national launch readiness.

01**PROVIDER-SAFE TARIFFS**

Service-level costs, safety-net and rural viability, high-acuity and teaching adjustments.

UNVALIDATED**02****STAFFED CAPACITY**

Real appointment hours, diagnostic follow-through and workforce response under regulated prices.

UNVALIDATED**03****CASH TRANSITION**

Annual sponsor transfers, collections, run-off claims and provider liquidity.

UNVALIDATED**04****MEASURED NET VALUE**

Population-level QALYs, financial protection, disability and illness-income effects.

UNVALIDATED

The scenario also does not define a statutory standard of medical necessity. Future utilization, waiting-time responses and provider supply must be treated as unresolved model inputs, not automatic savings.

Verification boundaries and next steps

This is a reproducible arithmetic extension of a published 30-year conceptual counterfactual, with explicit source limits. No claims of national executable savings follow from these charts.

SOURCE AND RECONSTRUCTION DISCIPLINE

01 CONTROLLING 30-YEAR STUDY

Document 4, Technical Assessment, Appendices B/C/D/F. Original Appendix N preserves superseded historical calculations.

02 ALTERNATIVE RATE RATIOS

JAMA, RAND, Milliman and HCCI mixed samples are non-equivalent; the published illustrations carry unresolved local 30-year reconstruction residuals of about \$0.1B-\$3.9B.

03 NATIONAL DATA ANCHOR

Cited CMS 2024 NHE: \$5,278.588B. The source dataset and the original full 30-year B0 generator are not bundled with this research release.

04 COMPANION WORKBOOK

100-Year Financial Model: all 100 annual rows, 30-year controls, scenario formulas and future-year sensitivities. Scenario B includes conditional administration; C phases prices using rollout. Their pairwise differences are not isolated causal effects.

EXTERNAL CHECKS AND DOCUMENTATION

CMS: National Health Expenditure Projections 2025-2034 (2026).

<https://www.cms.gov/data-research/statistics-trends-and-reports/national-health-expenditure-data/projected>

CBO: Long-Term Budget Outlook Data 2026-2056 (February 25, 2026). <https://www.cbo.gov/publication/62044>. A federal budget view is not the same as all-sponsor national spending.

FINAL VERDICT

CONCEPTUAL GO / SAVINGS UNPROVEN / LAUNCH NO-GO