GUIDEWELL

An ACA Update

from a Guy with a Pathological Obsession with Risk Adjustment

J. Gabriel McGlamery November 25, 2023

Agenda

- How To Think About ACA Risk Adjustment (Without Getting A Migraine)
- How To Evaluate ACA Risk Adjustment It Works! Mostly!
- The Biggest Problems in the ACA and How to Fix Them

Goals: Beginners

If You Think ACA Risk Adjustment is Confusing You're Right!

But there is a better way to explain it to friends, family, and strangers

Also – I put pictures of my dogs in the deck because they're cute.

Goals: Intermediate

1. Inadequate Risk Adjustment Drives Underpricing

Lowering risk transfers increases competition for low-risk enrollees

The lowest-cost issuer gets low-risk enrollees because healthy enrollees are price sensitive

Underpricing allows issuers to buy rapid growth which provides economies of scale

2. Exponential Growth Hides Underpricing

The transfer operates like a loan from high-risk to low-risk issuers

If an insurer grows fast enough, current-year underprediction of transfer liability hides prioryear underpricing

Rapid growth appealed to public companies, appeasing investors and market prices*

3. Underpricing Hurts Everyone

It lowers subsidies, increasing morbidity and the uninsured rate

It shrinks transfers, pushing up premium, and making quality coverage less affordable It forces efficient issuers to choose between sustainable rates or losing scale

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*Before the Fed increased Treasury Bond rates, markets rewarded growth more than they rewarded profit and sustainability. Once interest rates increased, it provided a low-risk investment that attracted a lot of investor capital, putting pressure on public companies, shifting incentives from growth to profitability.

Goals: Intermediate

Risk Adjustment works, but it's weak. Weak Risk Adjustment leads to underpricing. Risk Adjustment + Rapid growth can hide underpricing... ...until growth slows and pops the bubble of systemic risk. Sound familiar?

Goals: Advanced





What Is ACA Risk Adjustment?

Those Slides that are in Every Presentation on ACA Risk Adjustment

What is Risk Adjustment?

The Official Version That You've Heard 100 Times By Now

- To mitigate problems caused by risk selection across plans in the individual market, the ACA established a permanent risk adjustment program.
- This program transfers funds from (both on- and off-Marketplace) plans with healthier enrollees to plans with sicker enrollees, after accounting for age and other factors on which premiums already vary at an individual level.
- Risk adjustment aims to make plan premiums charged to enrollees reflect differences in scope of benefits and network coverage rather than differences in enrollee health status.
- It also aims to mitigate incentives for plans to avoid high-cost individuals.

NBER, *Timothy Layton, Ellen J. Montz*, <u>HEALTH PLAN PAYMENT IN U.S. MARKETPLACES: REGULATED COMPETITION WITH A WEAK MANDATE</u>, May 2017

Obligatory Scary Transfer Equation Slide

$$T_{PMPM} = \left[\frac{PLRS_i \cdot IDF_i \cdot GCF_i}{\sum_i (s_i \cdot PLRS_i \cdot IDF_i \cdot GCF_i)} - \frac{AV_i \cdot ARF_i \cdot IDF_i \cdot GCF_i}{\sum_i (s_i \cdot AV_i \cdot ARF_i \cdot IDF_i \cdot GCF_i)}\right]\overline{P}_s$$

Where:

- \overline{P}_{s} = State average premium, times 0.86
- PLRS_i = plan *i*'s plan liability risk score,
- AV_i = plan *i*'s metal level actuarial value,
- *ARF_i* = plan *i*'s allowable rating factor,
- $s_i = plan is share of state enrollment,$
- and the denominator of premium factor terms is summed across all plans in the state risk pool.

$$T_i = T_{PMPM} * \sum_b M_b$$

The final payment transfer is calculated by multiplying T_{PMPM} and the sum of the billable member months for an issuer.



No...Really... What is Risk Adjustment?

And how can I think about it without getting a headache?

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The Risk Adjustment Transfer

The Risk Adjustment Transfer

2021 Risk Adjustment Transfer



*Minus 14%





The Risk Adjustment Transfer Equation

2021 Risk Adjustment



emium*	Pre		Risk]
$RF_i \cdot IDF_i \cdot GCF_i$	$AV_i \cdot AR$	Ĩi	$RS_i \cdot IDF_i \cdot GCF_i$	PLI
$\cdot ARF_i \cdot IDF_i \cdot GCF_i)$	$(s_i \cdot AV_i \cdot AV_i)$	$GCF_i)$	$PLRS_i \cdot IDF_i \cdot G$	$\overline{\sum_{i}(s_{i}\cdot \cdot)}$
				100%
	gh-Risk		Big High-Bisk	90% — 80% —
– Big High-Risk Insurer	remium		50% Risk	70%
	High-Risk			60%
Small High-Risk Insurer	remium		Small High-Risk 12% Risk	40%
Big Love Diele Incumon	w-Risk		Big Low-Risk	30%
- Dig Low-Kisk insurer	remium		29% Risk	20%
Small Low-Risk Insurer	Low-Risk Premium		Small Low-Risk 9% Risk	10% — 0% —
	nium		Risk	

Risk Adjustment Compares Issuers' Share of Risk & Premium

- Assumes all issuers rate for the risk in the market.
- Risk Adjustment predicts each issuer's share of all risk and premium.
- The Risk Adjustment Transfer is the difference between share of risk and share of premium.

The Risk Adjustment Transfer is the difference between share of risk and share of premium.

\$600M	Risk Adju	ustment Transf	fer
Ş0001v1	-		
\$400M		Small High-Risk 2%	
\$200M		Big High-Risk	
φ200m		8%	
\$0M			
(\$200M)		Big Low-Risk -5%	
(*******		Small Low Pick 5%	
(\$400M)		Small Low-KISK-570	
(\$600M)			

Risk Adjustment Transfer Equation



Scaling the Risk Transfer

- The Risk Adjustment Transfer represents the difference between an issuer's share of all risk and share of all premium.
- CMS uses the state's average premium to convert the share into a dollar value. E.g., **\$494**
- The state's average premium is reduced by an estimate of costs that are independent of claims, which CMS estimates as 14%. E.g., **\$424**



Risk Adjustment Transfer Equation





Underpricing v. Underprediction

How to Think About Evaluating Risk Transfer Adequacy

What Is Risk Adjustment Transfer Accuracy?



Risk Adjustment Transfer Equation

Big High-Risk Issuer's Risk Adjustment Transfer



Does Risk Adjustment Predict Premium and Risk? Or Do Pricing Actuaries Predict Risk Adjustment?

This Chart shows risk transfers are predictable It doesn't show whether Risk Transfers are adequate or if premiums are higher when transfers are too small



If risk adjustment transfers are weak:

- High-risk issuers raise premium.
- Low-risk enrollees select the low-cost issuer.

Either way, premium is the difference between claims and risk adjustment.

These charts use URRT individual market data.

- The date applies to the experience period used to inform the URRT submission, not the URRT payment year.
- URRT data has survivor bias, which you can see where the trend line is higher than 0,0.
- This includes issuers who had at least 10k member months & non-zero risk transfer payments or charges.

This Chart Shows Risk Transfers Are Predictable It Does Not Show Whether Transfers Are Accurate



Risk Adjustment Tends to Benefit Low-Risk Issuers

Higher-Risk Issuers' Costs are Underpredicted by Risk Adjustment

The dotted trend line shows that nationally, lower-risk issuers tend to get an advantage from paying risk adjustment transfer, rather than claims.

Claims have greater variance than risk adjustment transfer.**

See Oskam and Kleef, <u>Heteroscedasticity of residual</u> <u>spending after risk equalization: a potential source of</u> <u>selection incentives in health insurance markets with</u> <u>premium regulation</u>

- This chart shows all combinations of issuing entities with at least 10k member months, at a state level, as long as they had some risk adjustment payment or charge. Merged markets were excluded.
- This uses CMS MLR data.*
- Credit to Oliver Wyman for this measure and see their recent analysis: <u>Aca Risk Adjustment — A Success Story</u> <u>With Room To Improve</u>

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*This measure uses MLR individual market data, which includes catastrophic and grandmothered plans and is adjusted for high-cost risk pools and, where appropriate, state reinsurance.

** Risk is risky. Higher-risk issuers tend to have larger reserves and more conservative strategies. Risk adjustment transfers are not intended to reduce the volatility, but it should account for the impact heteroscedasticity has on premium.



Issuer/State Transfer Accuracy

Evaluating The Risk Adjustment Transfer's Accuracy



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Issuer/State Transfer Accuracy



Market Response to Inadequate Risk Adjustment

High-risk is Underpredicted & Low-Risk is Underpriced

Current Risk Adjustment Incentives

1. Inadequate Risk Adjustment Drives Underpricing

Lowering risk transfers increases competition for low-risk enrollees The lowest-cost issuer gets low-risk enrollees because healthy enrollees are price sensitive

Underpricing allows issuers to buy rapid growth which provides economies of scale





*Before the Fed increased Treasury Bond rates, markets rewarded growth more than they rewarded profit and sustainability. Once interest rates increased, it provided a low-risk investment that attracted a lot of investor capital, putting pressure on public companies, shifting incentives from growth to profitability.

The Two-Margin Problem In Insurance Markets

If you talked to me in 2023, I probably recommended you read <u>The Two-Margin Problem In Insurance Markets</u> by Geruso, Layton, McCormack, and Shepard.

- Most people ignored me.
- At least one person printed it out to show me he will read it eventually.
- At least two people gave up half-way through.
- Three people said they read most of it.

*These slides are not a substitute for reading the actual paper. This paper is deep, complicated, and written by people who are way smarter than me. These slides are an oversimplification, but I hope to capture some of the points, as they help explains some of the patterns we found in our analysis.

The Two-Margin Problem In Insurance Markets

Most people who opened the paper and recoiled in horror at 80+ pages of econogibberish.



So, if I want people to understand why I keep recommending this paper

- I need to make slides translating it from Economist to English
- Fill the slides with cute dogs and adorable demand curves

evel of transfers

But I realized my presentation is too long & stuck those slides in the appendix.

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BACLA

AC. (S ... 5

Market Response to Lower Risk Adjustment Transfers



Over time, new issuers have gone after lower-risk enrollees, increasing the distribution of issuers' risk This is a national aggregate measure of risk transfer adequacy. Each point is an issuer with 100k+ member months.



- These graphs use CMS MLR data.*
- Each point is the national aggregate
 for an issuing entity with at least
 100,000 member months of
 enrollment.
- Values represent the enrollmentweighted average of the state-specific issuing entities.
- For example, GuideWell would be represented by a single point. That point would use a weighted average of Florida Blue's PPO, HMO, and FHCP (a provider-run Florida HMO).
- MLR allows us to look at issuer aggregate claims, including capitated claims.** Aggregating entities under common ownership improves alignment between capitated payments and enrollee risk, but there might still be misalignment for providers serving enrollees in multiple market segments.

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*This measure uses MLR individual market data, which includes catastrophic and grandmothered plans and is adjusted for high-cost risk pools and, where appropriate, state reinsurance.

Difference-in-Claims v. Risk Adjustment Transfer



Florida's tighter alignment to the ideal fit is in part because of pricing flexibility and its large number of rating areas. The use of premium in the GCF can cause geographically correlated overprediction to push down premium in that rating area, reduce the impact the rating area has on the transfer. With 67 rating areas (66 competitive), this has a much larger impact on Florida than any other state.

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These charts use MLR individual market data, which includes catastrophic and grandmothered plans and is adjusted for high-cost risk pools and, where appropriate, state reinsurance.

Medicaid Expansion Doesn't Help Inaccuracy





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These charts use MLR individual market data, which includes catastrophic and grandmothered plans and is adjusted for high-cost risk pools and, where appropriate, state reinsurance.

But State Reinsurance Does Mitigate Transfer Inaccuracy!

Probably because it reduces the variation of issuers' claims from the state average claims.





State Reinsurance waivers exacerbate economic and racial gaps in coverage* so it's not a good solution.

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cost risk pools and, where appropriate, state reinsurance.

catastrophic and grandmothered plans and is adjusted for high-cost risk pools and, where appropriate, state roinsurance, which is income neutral (reinsurance) you will replace low-income enrollees with a smaller number of the state roinsurance is the bigher income enrollees and where appropriate, state roinsurance is the bigher income enrollees and the state roinsurance is the bigher income enrollees and the state roinsurance is the bigher income enrollees and the state roinsurance is the bigher income enrollees and the state roinsurance is the bigher income enrollees and the state roinsurance is the bigher income enrollees and the state roinsurance is the bigher income enrollees are the bigher income enrollees and the state roinsurance is the bigher income enrollees are the bigher *Different presentation, but if you replace a subsidy that targets lower-income enrollees (APTC) with a higher-income enrollees. It will exacerbate problems with income correlation, like racial coverage gaps.

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Exponential Growth Hides Underpricing

- The transfer is like a loan from high-risk to low-risk issuers
- An insurer that grows fast enough can "borrow" enough money to avoid having to price correct.
- This doesn't need to be intentional for it to mask underpricing



Net Federal Risk Adjustment Transfer Liability

Enrollment Growth Rate



Based on MLR PUF, Financial Reporting, and Public Statements

■ 2018 ■ 2019 ■ 2020 ■ 2021 ■ 2022

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Exponential Growth Hides Underpricing



The filled areas are Bright's risk transfer liability

The **blue line** is the risk adjustment transfer liability Bright reported in financial statements

The **red area** is the difference between predicted and actual risk transfer charges.

Growth makes it hard to tell whether an issuer is continuing to underpredict its transfer liability. This doesn't need to be intentional to be a problem.

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Underpricing Hurts **Everyone**

> Underpricing Hurts Issuers Who Offer High-quality Plans

- Fewer people can afford high-quality plans.
- \circ $\,$ Transfer value scales with state average premium.
- High-risk issuers absorb unpaid transfer liability from insolvent issuers

Underpricing Hurts Subsidized Enrollees

- Underpricing the benchmark plan lowers subsidies.
- Lower Subsidies means fewer people can afford higher-quality coverage.
- Fewer people can get \$0 Bronze.

> Underpricing Hurts Underpriced Issuers

- They get less money. Do I even need to explain this?
- To get a price advantage from inaccurate risk adjustment transfers, you must predict competitor and enrollee behavior. This introduces more game theory into pricing.





Recommendations

Systemic Problems Require Systemic Solutions

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Recommendation 1: Improve Accuracy

If the Transfer Formula is accurate, Issuers can "price for the risk in the market"

- An issuer with enough money to pay claims should have enough to pay the risk transfer charges.
- This means the transfer equation predicts each issuer's share of risk and premium.
- It also means predicting the share of risk and premium by metal level, rating area, etc.

If the Transfer Formula is not accurate, pricing gets complicated

- Accounting for inaccuracy requires you to predict the distribution of enrollment, which means predicting how competitors and enrollees respond to your pricing.
- This means inaccuracy requires issuers to use game theory when setting rates.
- Game theory gets complicated and volatile.

More Inaccuracy in the Transfer Equation? Pricing Requires More Game Theory!

Applying Predetermined Risk Scores to New Issuers



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*Only one issuer will offer the lowest and second-lowest silver plans, allowing them to offer \$0 CSR coverage to healthy CSR enrollees who make up a large share of both the risk and the premium in states without a Medicaid expansion. However, because CSR enrollee risk is overpredicted, a predetermined risk score may work against a new issuer.

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No Alternative to Improving Accuracy

The Risk Adjustment Transfer is **not** accurate, for a lot of reasons

- The risk model is not the biggest problem. It is what CCIIO has focused most of its time testing. t's not perfect, but it's using higher-income enrollees to predict lower-income enrollee behavior.
- There are lots of problems with CSR enrollee predictions CCIIO validated some of the biggest in their October 2021 White Paper...

...but they said it's fine because the problems sort of cancel each other out...

...at a national level...as long as one issuer enrolls all CSR enrollees.

- Right-hand side should align with pricing restrictions...but it doesn't.
- RADV, Metal levels, SEPs, RxCs...please don't get me started.

Recommendation 1: Fix everything.

It can be incremental if problems are fixed faster than the market's response. Just don't take shortcuts, don't make new problems, and don't assume the go away if you ignore them GUIDEWELL

Scaling the Risk Transfer

Inaccurate Pricing = Inaccurate Risk Adjustment Transfers

- State Average Premium isn't a reliable measure of market average risk Insurers and regulators make mistakes, underprice to buy scale, or fail to predict systemic issues.
- Underpriced insurers have an outsized impact on state average premium
- Scaling transfers with premium spreads the effect of pricing mistakes

De-couple Pricing From Risk Adjustment to Reduce Systemic Risk

Recommendation 2: Scale to Claims

Scale Risk Adjustment Using State Average Claims, Not Premium

- State average claims, with a factor for claims-correlated non-claims costs, would prevent inaccurate rates from causing inaccurate risk adjustment transfers.
- CMS would need to calculate the state average claims using the values that are reported for MLR, because EDGE does not include capitated claims.
- Claims-correlated costs should be included by having a factor, like how the transfer formula currently reduces transfer by 14% to account for premium that does not correlate with risk.

Example:

- State Avg Premium = \$494pmpm.
 State Avg. Premium * 0.86 = \$425
- State Avg Claims = \$400pmpm.
 State Avg. Claims * 1.06 = \$425

Money Changes Value Over Time

The Risk Transfer is Like a Loan from High-risk to Low-risk Issuers

Low-risk issuers keep the interest earned from risk transfer accrual.

- This allows low-risk issuers to set lower rates, which lowers subsidies.
- It rewards late payment of risk adjustment charges.
- Underpricing and expanding enrollment can function like borrowing more money to pay off an old loan.
 It can be difficult to see if the issuer is solvent until its growth slows and you can tell profit from transfer accrual.

Higher-Risk issuers pay interest while waiting for risk adjustment payments.

- Claims from high-risk enrollees are due months before the transfer is paid.
- Higher-risk issuers must allocate reserves or borrow to maintain cashflow while waiting for the transfer.
- This makes high-risk enrollees more expensive, especially for insurers with high borrowing rates or low reserves.



Recommendation 3: Add Interest to the Risk Transfer

Option 1: Use a Weighted Average of the One-year T-bill Rate

- This would ensure issuers that anticipate risk adjustment charges can buy Treasury bonds to ensure the money accrued will be enough to pay charges the following year.
- Higher-risk issuers would still bear the risk of predicting borrowing costs when they set rates.

Option 2: Use the Weighed Average of Insurer Bond Rates

- Treasury rates would still make risk transfers the cheapest "loan" an issuer can get. Issuers with bad credit would have a larger incentive to underprice, avoid high-risk enrollees, and delay payment.
- An index rate based on the current borrowing cost for insurers is a little more complicated, but fairer for high-risk issuers and an incentive for all issuers to have adequate reserves, rather than just high-risk issuers.



Recommendation 4: "Escrow" Risk Charges

CMS could predict risk transfer charges using the interim transfer report and "escrow" APTC payments equal to anticipated transfer liability.

- Money would be released after CMS adjudicates risk adjustment.
- Overpredicting charges would require a low-risk issuer to miss claims submission deadlines that higher-risk competitors were able to meet. Underprediction is more likely.
- The impact is limited by APTC, which reduces the operational complexity for CMS.

This has a variety of benefits:

- 1. It is easier to identify underpriced issuers during rate review if issuers cannot use risk transfer for cash-flow.
 - Identifying underpricing before rate review may prevent it from exceeding reserves and inflating a balloon of systemic risk.
 - Issuers will not be able to use risk adjustment to grow their way out of underpricing.
 - Identifying insolvency in April means more opportunities to mitigate the damage.

2. Submitting claims to EDGE before the Interim Report improves the quality of data used for rating.

- Issuers have deadlines to submit information to EDGE throughout fall and winter.
- The final deadline, April 30, includes runout period claims, but can include supplemental files that may have a large impact on risk scores.
- Issuers would have an incentive to submit supplemental files earlier, preventing surprises after rates are submitted.

3. It mitigates the advantage low-risk issuers get from interest on transfer accrual.

- CMS could apply interest on escrow to the risk adjustment user fee or high-cost risk pool charges, benefitting all issuers.
- It would reduce the delay in transfer payments.

4. Escrow APTC Amounts Equal to Interim Transfer Report Charges

1. Q: Does this unfairly burden low-risk issuers?

A: No. An issuer's transfer liability is based on its risk, relative to all issuers in the state. So, liability only exists for low-risk issuers to the extent higher-risk issuers submitted timely EDGE data. The only scenario where escrowed payment would be excessive is where higher-risk issuers met an objectively larger burden and lower-risk competitors did not.

Any excessive escrow would be functionally identical to the experience of high-risk issuers who pay for their high-risk enrollees while waiting up to 23 months for their full transfer payments.

2. Q: Can the escrow amount be limited?

A: Yes, the escrow amounts could be a percentage of predicted transfer liability or the prediction could be calculated using claims with a date of service prior to some certain deadline. The escrow is inherently limited by an issuer's transfer liability, so this would have a larger impact on growing issuers.

3. Q: Does the escrow amount need to be limited to reflect the impact of claims received during the runout period?

A: No. High and low-risk issuers both receive claims during the runout period and the relative experience during the runout period is likely to reflect the issuer's relative experience during the benefit year, which would **increase** the low-risk issuer's transfer liability. If an issuer relies heavily on the supplemental file and waits to submit it until after the interim data is pulled, there might be a material impact to the issuer's transfer liability but should be discouraged. Relying heavily on the supplemental file reduces the role of the clinician and undermines confidence in the accuracy of risk adjustment. Late submission undermines other issuers' ability to set accurate rates, giving the late issuer an informational advantage.

4. Q: Don't low-risk issuers have a right to the interest on their transfer accrual?

A: No. Risk Adjustment transfer is intended to pay claims and claims-correlated administrative costs. It is currently functioning like an interestfree loan. Besides the obvious benefits, this means entities with low capital reserves will want to avoid the cost of having higher-than-average risk and will have a stronger incentive to lean on this "loan" to buy scale, hoping that it will lower their administrative costs or force competitors out of the market. The transfer should reflect the time value of money, but if it won't, reducing the duration it is held will prevent issuers from "rolling over" this loan by expanding rapidly.



Questions?

You should have Questions

Risk Adjustment is a complicated and counterintuitive solution to a more complicated problem This presentation simplified some issues for the sake of time and sanity



Dogs and Demand Curves

Good Slides I Won't Have Time For

If You Like the Slide Deck, You'll Love the Paper!

WARNING

These slides are not a substitute for reading The Two-Margin Problem In Insurance Markets

- I'm trying to convey insights I got from reading the paper.
- The paper is *deep* and written by people smarter than me.
- It is complicated, but not as complicated as the individual market.



Risk Adjustment Mitigates The Impact Of Adverse Selection

- **Risk adjustment can remove the competitive benefit an issuer gets from risk selection strategies.** This means it can remove the competitive benefit of inadequate networks, unreasonable claims denials, discriminatory benefit design, and other ways insurers can design plans to be less attractive to higher-risk enrollees.
- Unlike Medicare's risk adjustment, ACA risk adjustment is zero-sum. Ancillary goals, like improving coding, undermine the program's ability to mitigate the impact of adverse selection and will inevitably result in unintended consequences.
- Without adequate risk adjustment, compliance mandates reward the least-compliant issuer. Market pressure will encourage issuers to find ways to reduce the value of insurance that get around compliance requirements. Issuers who act in good faith and offer anything better must raise rates and will lose enrollment and revenue.
- Do not assume that issuers who receive risk transfer are "winners".

Higher quality coverage attracts expensive higher-risk enrollees, who are less price sensitive. For high-quality insurance, reducing risk transfers shrinks enrollment, revenue, economies of scale, and lowers MLR, but it does not mean lower profit margins.

Competitive Equilibrium In a Risk Adjusted Market

- Stronger risk adjustment increases competition for higher-risk enrollees.
- Weaker risk adjustment increases competition for lower-risk enrollees.
- In 2018, CMS cut risk transfers by 14%, weakening risk adjustment.
- Competition for low-risk enrollees fueled underpricing to improve efficiency through scale.



Competitive Equilibrium In a Risk Adjusted Market

	 Lower Efficiency Price Disadvantage Unappealing to low-risk enrollees 	 Higher Efficiency Price Advantage Attracts low-risk enrollees Good Boy!
 Higher Quality Attracts High-Risk Enrollees Receives Transfer Payments 	Higher Premium & Higher Risk The cost of high-risk enrollees exceeds risk transfer payments, discouraging over-insurance	Lower Premium & Higher Risk Risk Transfers protect it from underpricing and risk selection
Lower Quality Unappealing to High-Risk Enrollees Pays Risk Transfer Charges 	Higher Premium & Lower Risk Bad Dog!	Lower Premium & Lower Risk Risk adjustment relies on high- risk enrollees' judgement to limit the advantage of trading efficiency for quality





 $W_L = W$ ant Low-Cost Insurance (This is also the demand curve for any insurance, H or L $P_L = P$ rice of Low-Cost Insurance



GUIDEWELL These slides are an oversimplification of the illustration of individual market dynamics. The Two-Margin Problem in Insurance Markets explains how this illustration is shaped by claims cost, consumer demand, pricing, benefit mandates, and other forces.



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 $W_L = W$ ant Low-Cost Insurance $P_L = P$ rice of Low-Cost Insurance $W_H = W$ ant Higher-Quality Insurance $D_H = D$ emand Curve for High-Quality Insurance

Risk Adjustment Moves the Internal Margin

W_µ

 D_H

Lowering the **High-Quality** price

means more people can afford it

and it has a larger market share

nternal

W,

Demand for W_H

Buy Low-Cost

Risk transfer

the price of

Insurance (P_{H})

High-Quality

payments lower

Price of High-Quality

Price of Low-Cost

Insurance (P_i)

Risk Adjustment transfers money from higher-risk to lower-risk issuers

This increases the share of the market who can afford **High-Quality** insurance and makes it harder to compete by "cream skimming"

When **Low-Cost** gets more

get larger, minimizing the

impact on enrollment.

Uninsured

expensive, premium subsidies

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Risk adjustment charges increase the price of **Low-Cost** insurance. Premium subsidies are tied to the value of the lowest-cost silver plans and limit the price of **Low-Cost**.

Buy High-Quality

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 $W_L = W$ ant Low-Cost Insurance $P_L = P$ rice of Low-Cost Insurance $W_H = W$ ant Higher-Quality Insurance $D_H = D$ emand Curve for High-Quality Insurance

External Margin

Better Subsidies Make High-Quality Coverage less Affordable



Is This Too Complicated?

NO! THIS IS **INSURANCE!**

If you want an easy market, go sell broccoli.

But...

The Paper Does Get Very Complicated

The authors admit the illustrations of risk adjustment were "the most difficult to illustrate graphically" and put them in the appendix.



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Figure A1: Equilibrium under Perfect Risk Adjustment(a) No Risk Adjustment(b) RA Shifts AC_L Up, Lowers \hat{s}^e_{LU}



: Starting from equilibrium in panel (a) and introducing perfect risk adjustment in panel (c), perfect risk adjustment up the average cost of L from $AC_L(s_{LU})$ to $RAC_L(s_{LU})$, reflecting the transfer away from L to H. Unlike AC_L , the ijusted RAC_L only depends on the extensive margin S_{LU} , not on the allocation across plans (s_{HL}) . The risk adjusted $RAC_L(s_{LU})$ intersects D_L at a lower point, shifting out the extensive margin from s^e_{LU} to \hat{s}^e_{LU} . Next, in panel (c) we at this lower extensive margin-type \hat{s}^e_{LU} shifts up D_H . Finally, in panel (d) we see that risk adjustment flattens the risk ed average cost of H, RAC_H , which like RAC_L no longer varies depending on sorting between the two plans, s_{HL} .

Ok, So What?

1. Premium subsidies increase the share of the market in Low-Cost Insurance



2. Risk Adjustment increases the share of the market with High-Quality Insurance



So What?

- 3. Increasing premium subsidies reduces the size of the High-Quality Market, unless CMS increases Risk Adjustment
- Healthy people are more price sensitive and more likely to be uninsured.
- Raising premium subsidies moves healthy people from **Uninsured** to **Low-Cost** coverage.
- If more healthy people buy **Low-Cost** morbidity of the benchmark goes down, lowing subsidies for all plans.
- Lower subsidies makes High-Quality less affordable reducing its market share, which increases its morbidity, which increases its premium.



(c) ACA-like subsidy, 15% L cost advantage



Appendix: Limited Transfer Liability Scenarios

When the risk transfer gets less accurate, predicting transfer liability requires more game theory

Predetermined Risk Scores for New Issuers Increases Complexity and Undermines Competitive Equilibrium

This section is an attempt to walk through the consequences of limiting the risk scores for new issuers entering the market. It gets complicated...and bad.

Here are the key points:

- 1. Limiting transfer or caping risk scores makes risk adjustment less accurate.
- 2. When risk adjustment is less accurate, it is more important to predict competitors' behavior and enrollee selection than to predict enrollee risk.
- 3. When issuers' try to "predict risk adjustment" their pricing is only accurate if they can predict how their competitors behave. This is game theory.
- 4. If risk adjustment transfers reflect the claims of higher-risk enrollees, prices are accurate regardless of whether the issuer pays risk adjustment or claims.

Applying Predetermined Risk Scores to New Issuers

Fig.1: Prior-Year Risk Transfer Equation



No New Issuer: Fig. 1

- 1. There are two incumbent issuers. One is lowcost and the other is high quality.
- 2. In the model, parameters like risk score, metal selection, average age, and selection behavior are assigned to cohorts of enrollees. These parameters are held constant across scenarios. The aggregate of these parameters aligns with state averages.
- 3. The Model assumes values used in the transfer are accurate. PLRS and IDF accurately predict relative claims, ARF, IDF, and AV predict relative premium, etc.

Fig. 2: Transfer Equation If Existing Issuers Stay in the Market



■ High-Risk Issuer ■ Low-Cost Issuer ■ New Issuer

Rating Assumptions: Fig. 2

- 1. The predetermined risk score for new issuers is 0.9.
- 2. A New Issuer predicts price sensitive enrollees have
- an average risk score of 0.85.3. The New Issuer predicts the difference between the
- healthy price-sensitive enrollee risk scores and the predetermined risk score would allow it to set rates 4% lower than the current low-cost issuer.*
- The New Issuer anticipates that the risk transfer will be 27% of its premium, claims will be 58% of premium, and profit margin will be 1% of its premium.

Fig. 2: Parameters With New & Existing Issuers

0			-		
	Member Months	PLRS	IDF	AV	ARF
High-Risk Issuer	9,195,000	2.228	1.023	0.667	1.972
Low-Risk Issuer	2,250,000	1.500	1.023	0.667	1.639
New Issuer	15,750,000	0.854/0.900	1.017	0.656	1.651

If this looks complicated, it's because it is. We used a model to predict enrollee and issuer behavior under various scenarios. This illustrates one basic scenario.

Fig. 3: Transfer Equation If Low-Cost Issuer Leaves

Game Theory

- 1. The Low-Cost Issuer leaves the Market.
- a. The New Issuer cannot set rates with a positive margin that are close to the New Issuer. It would lose scale, which would drive up operational costs as a share of all costs and cause it to lose leverage with providers.
- b. The New Issuer gets all the Low-cost issuer's enrollees, rather than just the healthy enrollees.
- The High-Quality issuer increases its rates. Combined with the impact of the New Issuer's rates on subsidies, 10% of the high-risk enrollees' switch from the High-Quality Issuer to the New Issuer, except for a cohort of members whose selection is driven by thirdparty payers.
- 3. If multiple New Issuers entered the market, competition would drive down premium, increase the risk of underpricing, and force existing issuers to raise rates or leave.

The model has parameters to account for taxes, fees, and administrative costs and whether they scale with claims, enrollment, or premium. Generally, half of any category of cost are fixed, based on rating assumptions and half are based on results.



Predetermined Risk Score

■ High-Risk Issuer ■ New Issuer

Results: Fig. 3

- 1. The New Issuer's actual enrollee risk scores wind up being 1.25 but it uses the
- predetermined 0.9 risk score to calculate its risk adjustment transfer.
- 2. The New Issuer's risk transfer charge is 24% of its premium but its claims are 67% and its costs exceed revenue by 4%.
- 3. The High-Quality Issuer gets a windfall because the predetermined risk score now underestimates its enrollees' risk.

Fig. 3: Parameters If Existing Issuer Strategy Responds to New Issuer

	Member Months	PLRS	IDF	AV	ARF
High-Risk Issuer	8,278,360	2.230	1.023	0.667	1.972
New Issuer	18,917,040	0.996/0.900	1.018	0.658	1.665

Fig. 1: Issuer Parameters Without New Issuer Member Months PLRS IDF AV ARF High-Risk Issuer 9,195,400 2.228 1.023 0.667 1.972 Low-Risk Issuer 18,000,000 0.935 1.018 0.658 1.650

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*Only one issuer will offer the lowest and second-lowest silver plans, allowing them to offer \$0 CSR coverage to healthy CSR enrollees who make up a large share of both the risk and the premium in states without a Medicaid expansion. However, because CSR enrollee risk is overpredicted, a predetermined risk score may work against a new issuer.

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Predetermined Risk Scores for New Issuers Increases Complexity and Undermines Competitive Equilibrium

1. Predetermined Risk Scores Only Attracts Low-Quality Insurers into the Market

- A. New Issuers can attract healthy price-sensitive enrollees by offering cheaper coverage than the existing low-quality insurers.* The new issuer will have an advantage over any low-cost insurers already in the market, especially if there is also a higher-quality insurer in the market.
- B. The higher the predetermined risk scores, the bigger the price advantage it gives new low-quality issuers.

2. Predetermined Risk Scores Prevents High-Quality from Entering New ACA Markets

- A. Issuers, including New Insurers, who want to offer higher quality coverage must rely on risk adjustment or increase their rates. Increasing rates will increase an insurer's morbidity, as healthier enrollees switch to lower-cost alternatives. This may require the insurer to raise rates even more or might even prevent the insurer from achieving pricing equilibrium.
- B. Insurers need a large amount of revenue to cover the cost of participating in the individual market. Cutting risk transfers, including using predetermined risk scores, can make it difficult for issuers to get enough revenue from high-risk enrollees.

3. Existing Low-Cost Insurers Can't Compete Against New Low-Cost Issuers with Predetermined Risk Scores

- A. Low-cost issuers use economies of scale to achieve efficiency over competitors. This means attracting price-sensitive enrollees by offering the lowest-cost coverage.
- B. Competition to be the lowest-cost issuer can have a "winner-takes-all" dynamic. Premium subsidies make enrollees more sensitive to the spread between their plan and the Benchmark plan. Only the issuer offering the lowest and second-lowest silver plan can offer CSR-eligible silver plans that are fully-subsidized for enrollees under 150% FPL. CSR enrollment makes up the majority of enrollment in Florida and is overpredicted in the risk adjustment transfer.
- C. Low-cost issuers must set higher rates if there are limits on risk score for new issuers. The limits will raise the average risk, which means lower transfer to higher-quality issuers and higher charges to other low-cost issuers. In either case, the existing issuer would need to raise rates. Since low-cost issuers will have a harder time maintaining the scale necessary to operate in the market if they raise rates, they will be in a worse financial situation and are more likely to leave the market.**

4. Existing High-Quality Insurers Will Raise Rates to Compensate for Lower Risk Transfers

- A. Overpredicting the risk of the new issuer underpredicts the risk of existing issuers, lowering the risk transfer to existing high-quality insurers. If the transfer goes down, but claims stay the same, issuers must raise rates, cut quality, or leave.
- B. Higher-risk enrollees are less price sensitive, but as the cost of high-quality coverage goes up and subsidies go down, some high-risk enrollees will switch from high-quality to low-cost insurance.

5. The Advantage New Issuers Get from Predetermined Risk Scores Can Disappear if Existing Issuers Raise Rates or Exit the Market

- A. Risk adjustment charges reflect the claims-correlated costs of attracting higher-risk enrollees.
- B. If predetermined risk score allows a new issuer to lower its premium, existing issuers must raise their premium or leave the market.
- C. If issuers raise rates or leave, higher-risk enrollees will switch to the affordable new issuer, increasing the new issuer's claims liability. This can push the new issuer's actual risk above its predetermined risk score, overpredicting its risk transfer liability.
- D. If an issuer lowers rates in anticipation of a lower risk adjustment charge, it will be underpriced if it gets higher risk enrollees. It is also more likely to get higher-risk enrollees and smaller risk adjustment charges.

6. Other Ways of Limiting Risk Transfers Also Undermine Equilibrium

- A. Issuers Must Rate for the Risk in the Market. Any limit on risk transfers for one issuers undermines this principle and forces them to guess at how much of their competitors' risk will reflect the risk adjustment model. This undermines the use of state average premium to scale the transfer by state and the use of silver premium as a way of scaling transfer by rating area.
- B. If the risk transfer is accurate, an issuer will be solvent regardless of whether it gets higher-risk enrollees with high claims or lower-risk enrollees with higher risk adjustment charges. Inaccurate transfer creates a risk that an issuer who priced to pay transfer is underpriced if they get higher-risk enrollees.
- C. Limits that cap transfer as a percent of premium or put a floor on risk score for new issuers would make markets risk for higher-quality issuers, especially if they are small or new. By reducing uncertainty for low-cost issuers, you reduce the correlation between claims and transfer and shift that uncertainty to the higher-quality issuers.

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Appendix Y: The Transfer Equation

Because you always needs a slide showing the transfer equation





what The Risk Adjustment Transfer Equation Represents

Risk Term

 $\begin{array}{cccc} Clinical & Induced & Geographic \\ Risk & Demand_i & Risk & i \\ \hline \Sigma_i \left(s_i \cdot \begin{array}{c} Clinical & Induced & Geographic \\ Risk & Demand_i & Risk & i \end{array} \right) \end{array}$

Predict a plan's share of risk and risk correlated costs

Rate Term

 $\begin{array}{cccc} Cost & 3:1 \ Age & Induced & Geographic \\ Sharing_{i} & Rating_{i} & Demand_{i} & Rate \ Factors_{i} \\ \end{array}$ $\Sigma_{i} \begin{pmatrix} Cost & 3:1 \ Age & Induced & Geographic \\ s_{i} \cdot Sharing_{i} & Rating_{i} & Demand_{i} & Rate \ Factors_{i} \end{pmatrix}$

Predict the share of risk-correlated premium that the issuer collected to pay those costs

 \overline{P}_s = 86% of State Average Premium

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 $T_i =$

 \overline{P}_{s}

The Risk Adjustment Payment Transfer Formula **Risk Term Rate Term** 86% of The Plan's Risk The Plan's Premium Transfer State Avg. The Risk for All Plans The Premium for all Plans Premium Each Plan's Each Plan's share of risk share of premium Scale using state at a rating area at a rating area average premium, level. minus the estimated level. share that is not claims-correlated