50 YEARS
1974 – 2024

TOKIO MARINE HCC

2024 ANNUAL MARKET REPORT

HCC Life Insurance Company Operating as Tokio Marine HCC – Stop Loss Group

Tokio Marine HCC – Stop Loss Group
A member of the Tokio Marine HCC Group of Companies
TMHCC1218 – 06/2024

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MESSAGE FROM THE PRESIDENT

Tokio Marine HCC – Stop Loss Group (TMHCC) is proud to present our 2024 Annual Market Report. As you have come to expect from this report, we provide useful information for consulting with your clients on the challenges of offering competitive and affordable healthcare benefits to their employees and their families. We cover topics including the continued escalation of catastrophic claims, top diagnostic categories by frequency, severity, and total cost, trends in transplants, and more. We also provide helpful information around subjects such as maturity of stop loss claims, appropriate specific deductible levels, average stop loss deductibles and claims by state, leveraged trend, cost containment savings, and Preferred Provider Organization network versus Reference-Based Pricing program experience.

Rising healthcare costs continue to be a major concern for U.S. employers in 2024, and there are many forces in play that are exacerbating these concerns. While $1 million+ claims were once rare, they have become a common occurrence, and now $2 million+ claims have also become frequent. High-cost gene therapy (GT) solutions are now quickly gaining approvals as well: as recently as 2021, there were only two approved GTs (Zolgensma and Luxturna), but at the time of this report release in mid-2024, there are now 14 GTs on the market, and that number is expected to more than double by the end of 2026. At an average cost of over $2.5 million, the exposure to these types of claims will impact more and more plan sponsors. Additionally, while there has been a great deal of discussion around healthcare issues at the Federal level (especially around medical service price transparency and high-cost drug pricing), with 2024 being a presidential election year, it is not expected that Congress will make any meaningful progress this year.

Our Top 10 Diagnostic Categories remain fairly consistent from year to year. However, it must be noted that 3 out of TMHCC's 10 most severe diagnostic categories include diagnoses primarily impacting those ages 5 years and under: Perinatal/Neonatal, Spinal Muscular Atrophy, and Congenital/ Chromosomal Abnormalities. Together, the diagnoses of this age group from newborns to very young children form many of our most catastrophic stop loss claims.

Cancers and cardiovascular diseases account for nearly half of our total stop loss spend this past year. Claims associated with musculoskeletal conditions and congenital abnormalities remain a cause for concern. Burns, transplants, and diseases treatable by high-cost specialty drugs or therapies are also among the highest-cost claims we have paid.

In addition to the information contained in this report, we also provide a portfolio of product offerings available to our customers alongside our market-leading stop loss solutions:

- 2023 marked the year we entered the Level Funded space, a decision driven by the market's need for additional options for small group fully-insured clients. This unique option allows clients converting from fully-insured coverage to benefit from cost mitigation programs and the flexibility of the third-party marketplace, while having a fixed monthly expenditure.
- Our market-leading, fully-insured Organ Transplant product shifts the burden of high-cost transplant exposure from your clients to us, while protecting the stop loss policy from premium increases and lasers associated with this exposure.
- We continue to develop our Simple. Secure. Smart. program that provides industry-leading turnaround time on stop loss claim reimbursements for the Administrators participating in the program.

We appreciate your continued interest in this report, and we encourage you to provide feedback – not only on the included content, but about other information you would like to see in future editions. If you have any questions as you read through the following pages, please reach out to us. Thanks again for your trust in and partnership with us, and we look forward to hearing from you!

TOKIO MARINE HCC

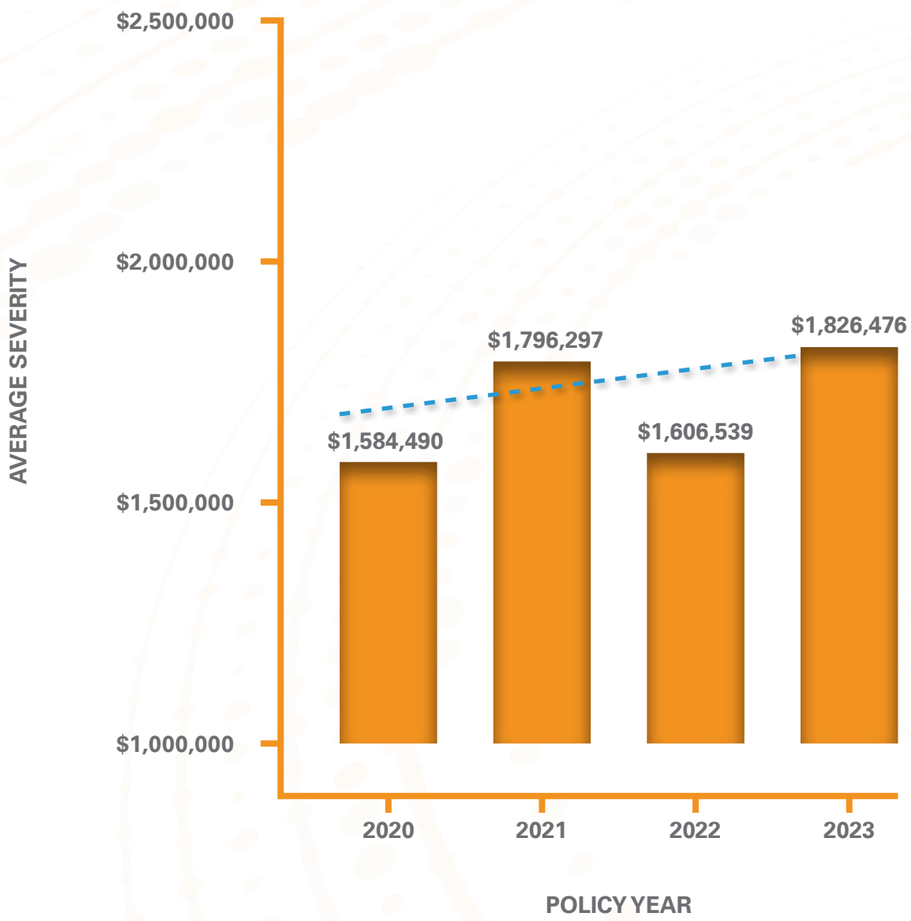
50 YEARS 1974 – 2024

MILLION DOLLAR CLAIMS BY SEVERITY

TMHCC has continued to see a significant increase in the severity of catastrophic stop loss claims, especially for claims over $2 million. The graph on the left represents our average specific stop loss reimbursement above the specific deductible for reimbursements exceeding $1 million. While in 2020 this average was about $1.58 million, in 2023 this has increased to about $1.83 million.

The graph on the right represents our average specific stop loss reimbursement above the specific deductible for reimbursements exceeding $2 million. The increase in our $2 million+ stop loss claim severity is even more apparent, going from about $2.71 million in 2020 to about $3.16 million in 2023.

AVERAGE CLAIM SEVERITY ABOVE $1,000,000



AVERAGE CLAIM SEVERITY ABOVE $2,000,000

MILLION DOLLAR CLAIMS BY FREQUENCY

When the Affordable Care Act (ACA) went into effect on January 1st, 2014, annual and lifetime maximums were no longer allowed in employer-sponsored health plans. The graphs below demonstrate the almost immediate impact of their removal when comparing the frequency of large claims for policy years 2013 and 2014. These graphs also reveal the continued impact over time by showing policy year 2023.

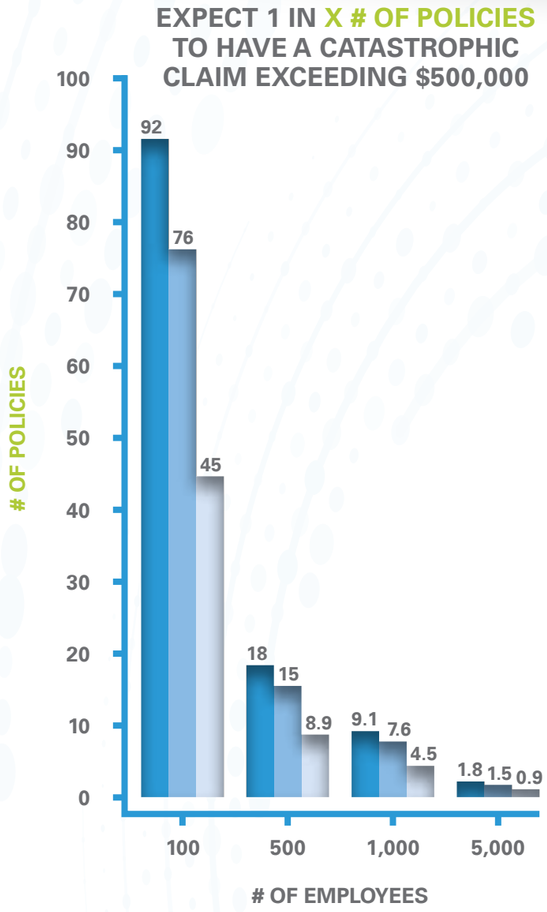
In looking at the graph on the left, you can see that a 100-life group used to expect 1 stop loss claim exceeding the specific deductible by at least $500K in every 92 policies in 2013, which dropped substantially to 1 claim in every 76 policies just a year later. Now, in 2023, they can expect 1 in every 45 policies. 5,000-life groups can now expect at least 1 of these stop loss claims every policy year.

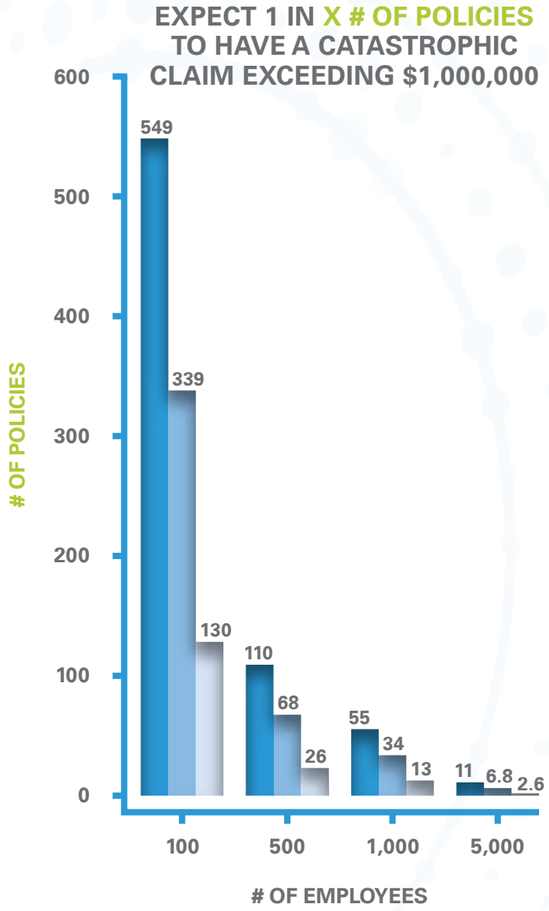
The impact of the ACA is even more apparent in stop loss claims exceeding $1 million (middle graph) and $2 million (right graph). When looking at the $2 million graph, the impact is astonishing: a 100-life group went from expecting 1 stop loss claim exceeding the specific deductible by at least $2 million in every 6,863 policies pre-ACA, to 1 in 2,843 the following year, and now to 1 in 472 policies in 2023. 5,000-life groups can now expect one of these catastrophic stop loss claims exceeding $2 million in every 9 to 10 policies.

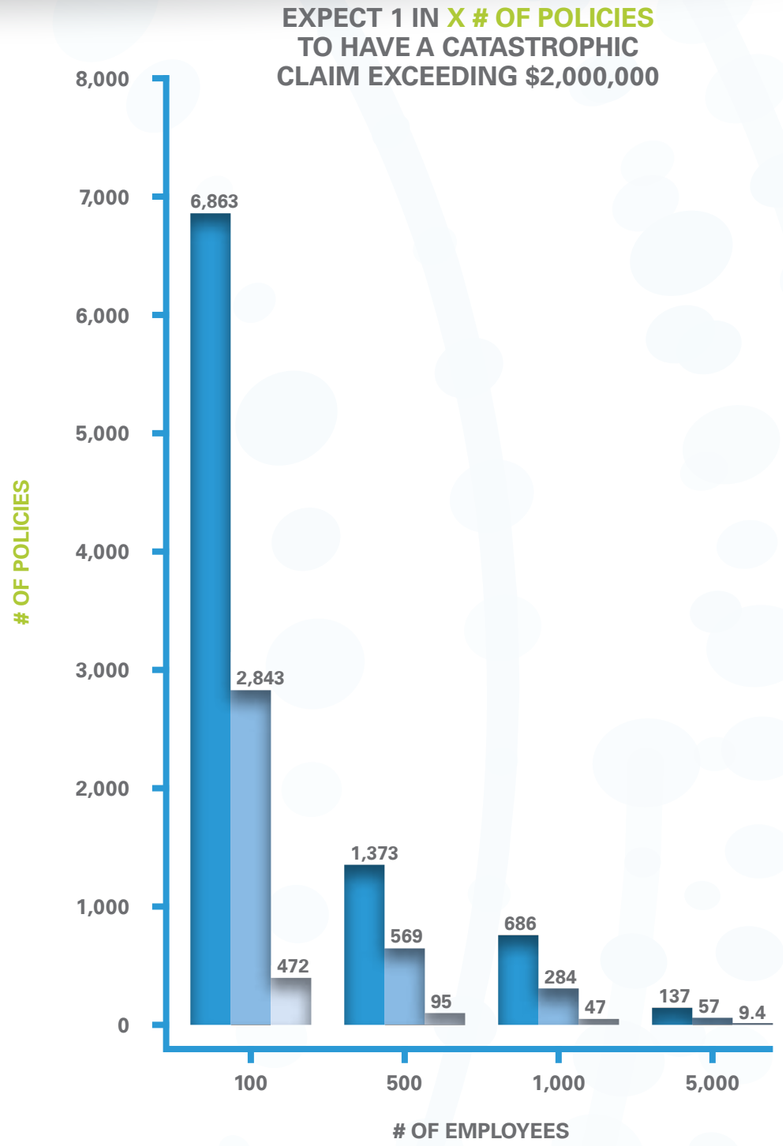
2013 (pre-ACA)

2014 (post-ACA)

2023 (present)







TOP 10 DIAGNOSTIC CATEGORIES BY FREQUENCY
2020-2023

Cancers – Malignant Neoplasm continues to be TMHCC's most frequent stop loss claim each year, followed by Cardiovascular Diseases and Musculoskeletal/Connective Tissue claims. In 2023, Cancers – Leukemia/Lymphoma/Multi Myeloma became our 4th most frequent claim, and has moved up one rank in our top 10 list every year since 2020.

Injury/Poisoning/External Causes repeatedly make it into our top 10 most frequent claims every year. While Respiratory Diseases replaced Sepsis in 2020, 2021, and 2022, undoubtedly due to the COVID-19 pandemic, Sepsis has now returned in 2023, knocking Respiratory Diseases out of the top 10 list.

- Cancers - Malignant Neoplasm
- Musculoskeletal/ Connective Tissue
- Cardiovascular Diseases
- Cancers - Leukemia/ Lymphoma/Multi Myeloma
- Nervous System Diseases
- Injury/Poisoning/ External Causes
- Digestive Diseases
- Crohn's/Ulcerative Colitis
- Endocrine/Metabolic Diseases
- Sepsis
- Respiratory Diseases

TOP 10 DIAGNOSTIC CATEGORIES BY SEVERITY 2020-2023

In 2023, 3 out of TMHCC's 10 most severe diagnostic categories include diagnoses primarily impacting those ages 5 years and under: Perinatal/Neonatal, Spinal Muscular Atrophy, and Congenital/Chromosomal Abnormalities. Together, the diagnoses of this age group from newborns to very young children form many of our most catastrophic stop loss claims.

Transplants has moved up in 2023 to become our most severe claim, having been in the top 3 since 2021 (see page 16, "Trends in Transplants" for more information). Our most severe claims in each of the last 4 years include Cancers – Leukemia/Lymphoma/Multi Myeloma, Chemo/Immunotherapy/Radiation, and HAE/Defects of the Complement System. A new category, Chronic Kidney Disease/Dialysis, appeared in 2023's top 10 most severe claims. Hemophilia/Bleeding Disorder and Hemolytic-Uremic Syndrome are also amongst our most severe claims year after year, each treatable with high-cost specialty drugs or gene therapies.

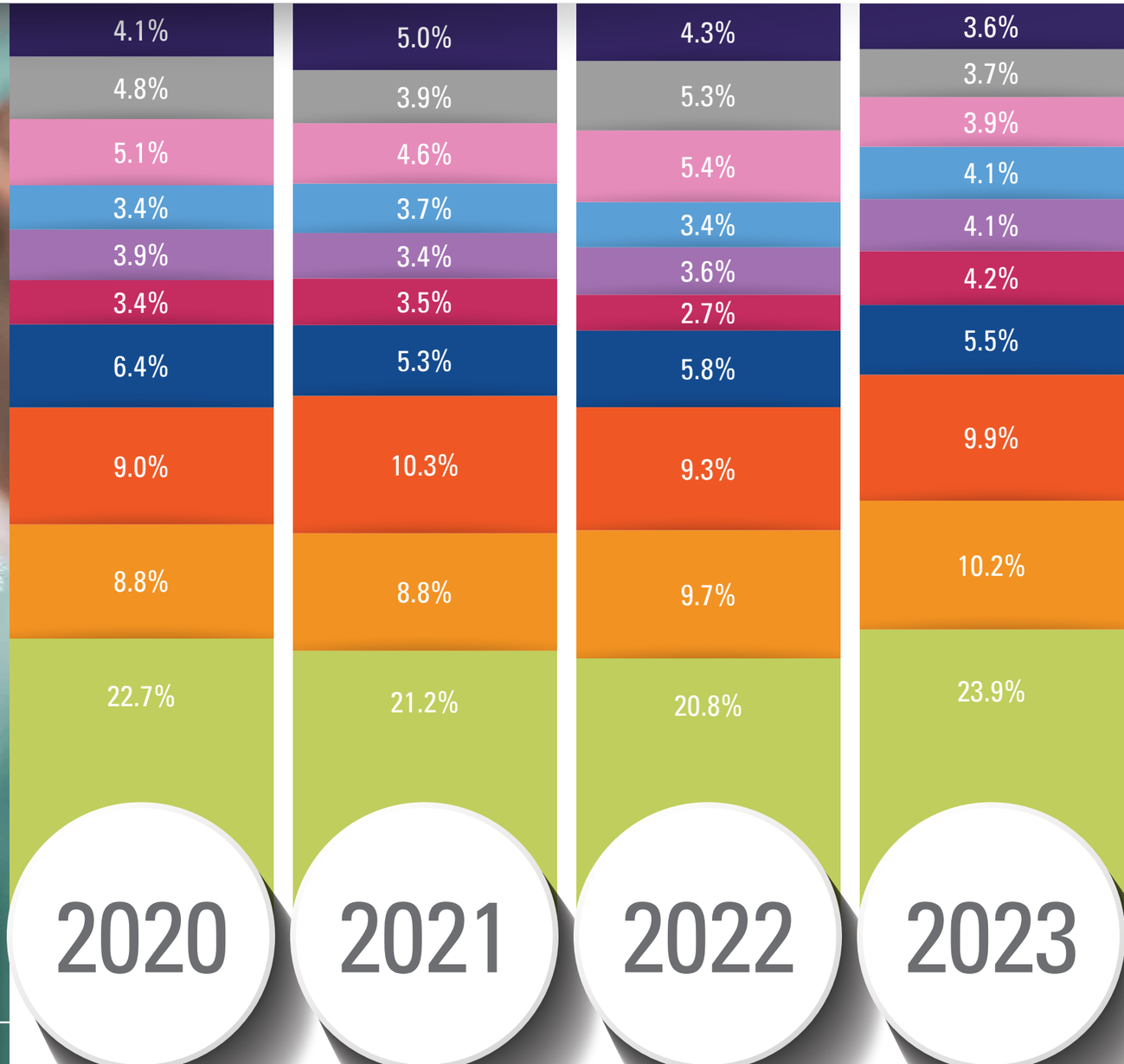
- Burns and Corrosion
- Transplants
- Spinal Muscular Atrophy
- HAE/Defects of Complement System
- Hemophilia/Bleeding Disorder
- Cancers - Leukemia/ Lymphoma/Multi Myeloma
- Perinatal/Neonatal
- Chemo/ Immunotherapy/ Radiation
- Chronic Kidney Disease/Dialysis
- Congenital/ Chromosomal Abnormalities
- Hemolytic-Uremic Syndrome
- Sepsis
- Blood Diseases/ Immune Disorders

TOP 10 DIAGNOSTIC CATEGORIES BY TOTAL COST 2020-2023

The below chart contains TMHCC's top 10 diagnostic categories as a portion of our total spend for each of the last 4 years, ordered by 2023's top categories. Cancers – Malignant Neoplasm remains our top diagnosis category contributing to total costs, being both frequent and severe in claims. This is followed by Cancers – Leukemia/Lymphoma/Multi Myeloma and Cardiovascular Diseases.

Respiratory Diseases, while ranking as our 5th and 4th top category for total costs in 2022 and 2021, respectively, has been replaced by a new category, Congenital/Chromosomal Abnormalities this year. This new category, along with Perinatal/Neonatal, demonstrates the significant total stop loss claims cost impact from those with an average age under 5 years old. Nervous System Diseases and Endocrine/Metabolic Diseases have each also grown as a portion of our total spend in 2023 compared to prior years.

- Cancers - Malignant Neoplasm
- Cancers - Leukemia/ Lymphoma/Multi Myeloma
- Cardiovascular Diseases
- Musculoskeletal/ Connective Tissue
- Congenital/ Chromosomal Abnormalities
- Nervous System Diseases
- Endocrine/Metabolic Diseases
- Injury/Poisoning/ External Causes
- Perinatal/Neonatal
- Sepsis



MATURITY OF STOP LOSS CLAIMS

Average Known Claims as a Percent of Ultimate Claims by Month Since Policy Effective Date

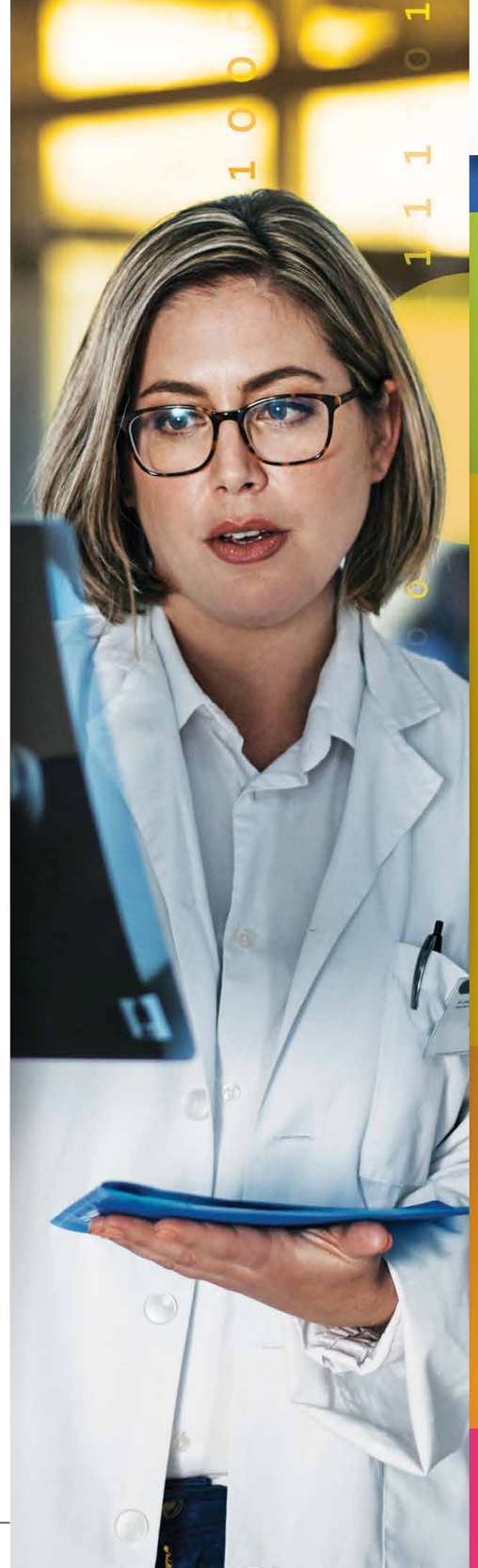
Many of our producers ask for "early locks" of 120 days or more for their clients' stop loss coverage, often spurred by their clients' budgeting process. However, after month 8 of the stop loss policy, only 37% of ultimate claimants and 51% of ultimate claim dollars are known at that point in time, on average. By the end of month 12, only 79% of claimants and 89% of the total reported claims dollars are reported on average, leaving the most recent experience year still significantly immature.

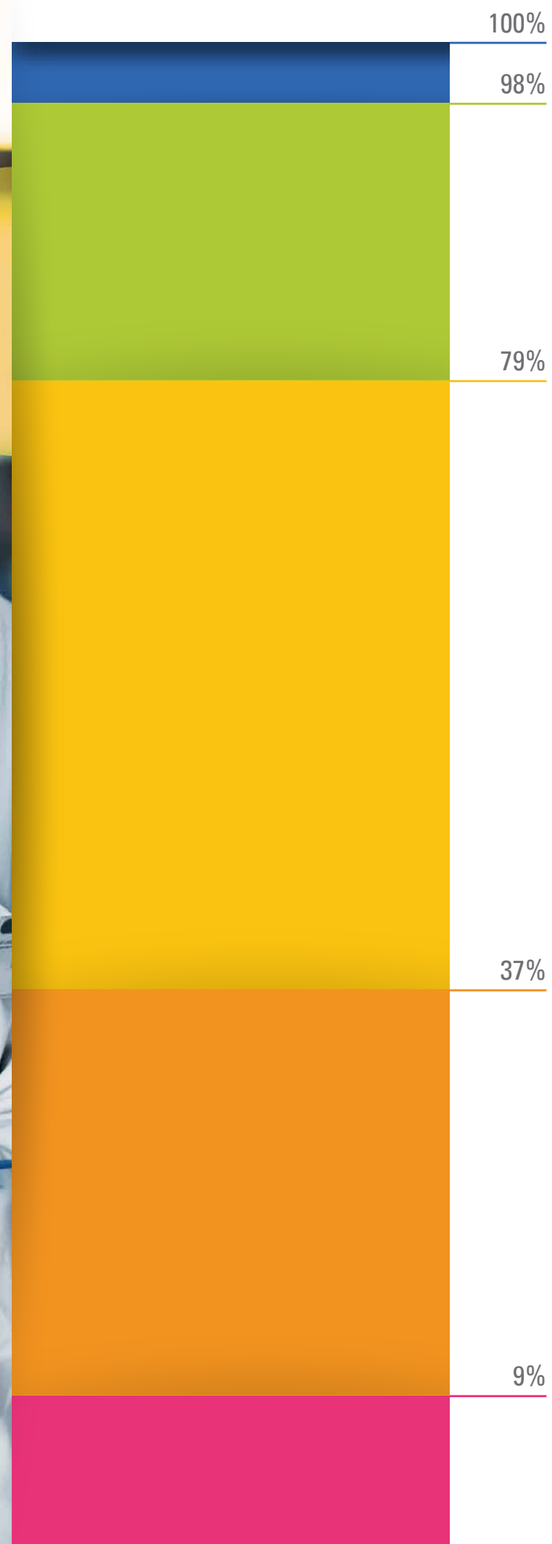
Given this uncertainty of predicting how the most recent experience year will turn out, underwriters must use caution in pricing these risky early locks, often resulting in higher rates for the policyholder. This data demonstrates why TMHCC's stop loss pricing is more accurate when following traditional renewal timelines that use 9 or 10 months of claims reporting.

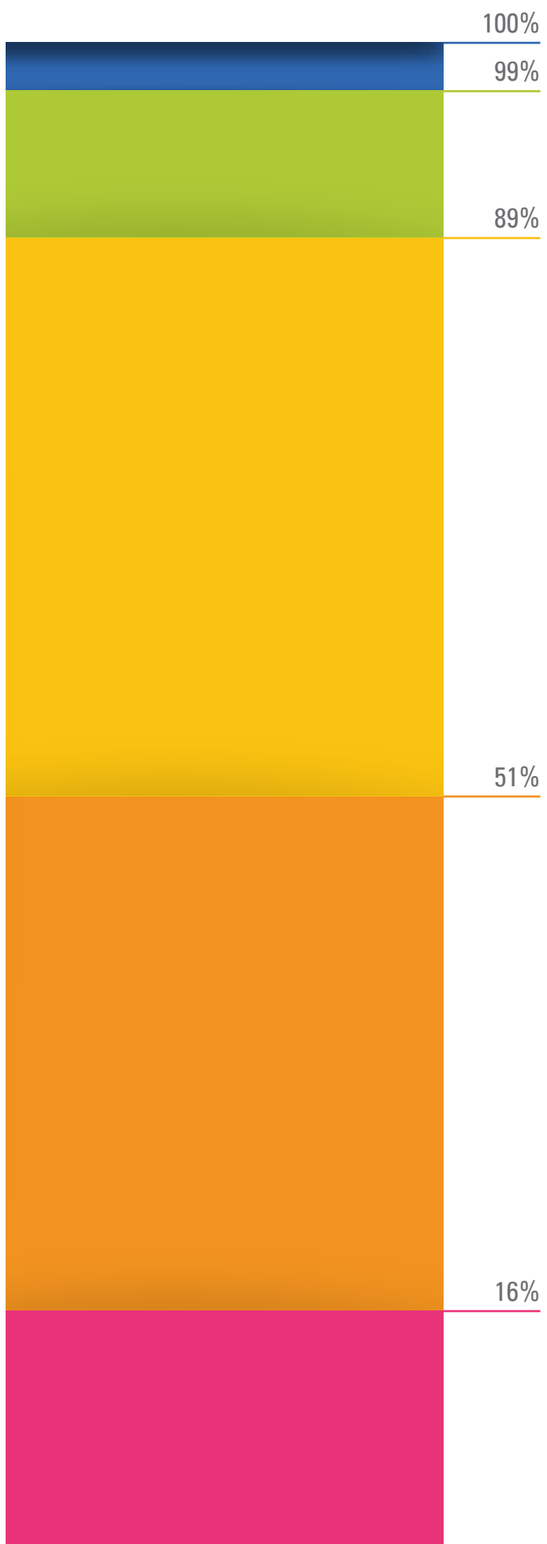
- 17+ Months
- 13 - 16 Months
- 9 - 12 Months
- 5 - 8 Months
- 1 - 4 Months

NAIC STOP LOSS INDUSTRY DATA

Check back for data updated with 2023 information.







TRENDS IN TRANSPLANTS

46,624

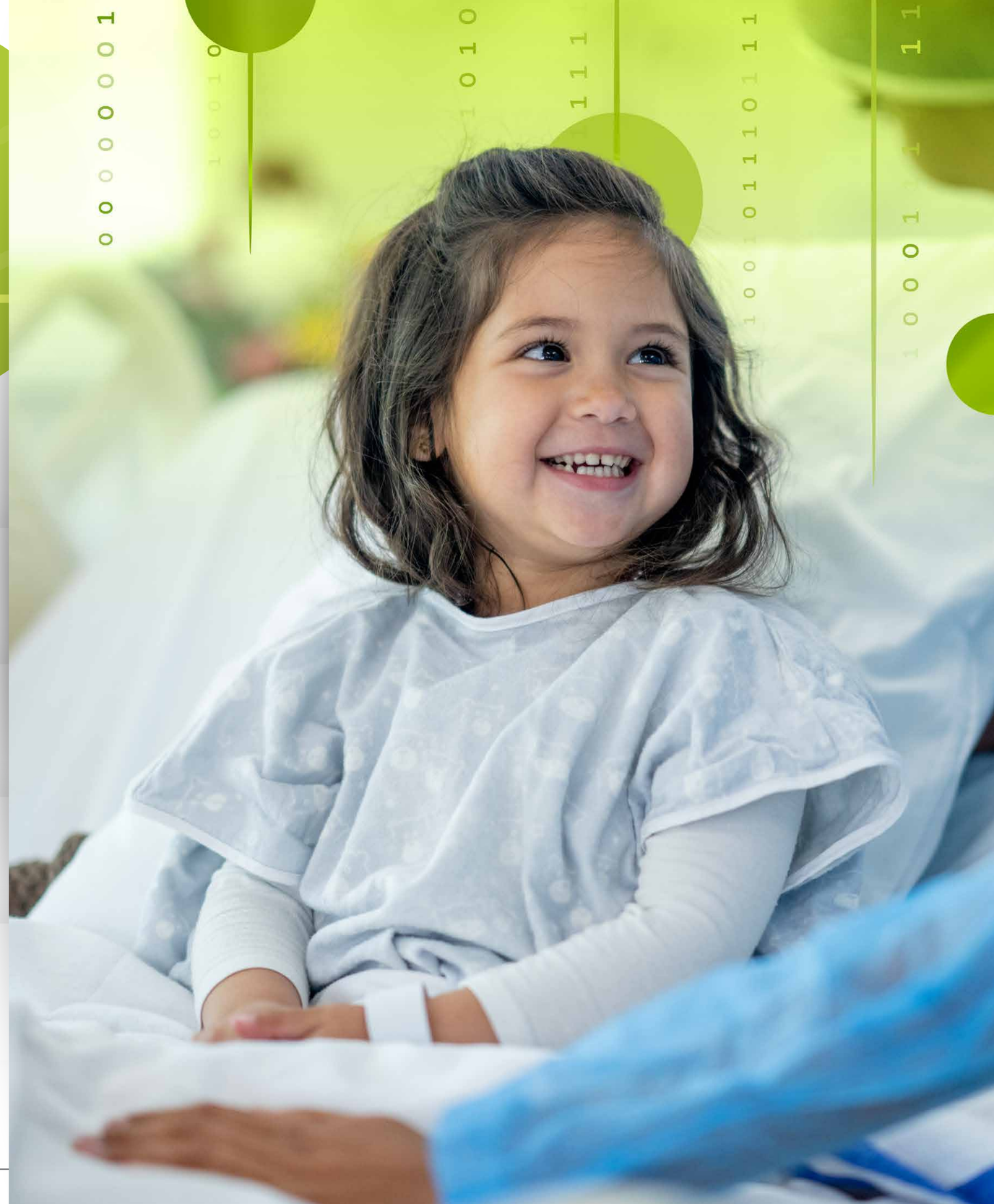
Organ Transplants in the U.S. in 2023, an increase of 8.7% over 2022 and setting a New Annual Record.

More than **14,500** Black patients, disadvantaged by calculations for estimating kidney function, were credited with adjustments to their time on the transplant waitlist. More than **2,000** of these patients received transplants in 2023. For the first time, there were more than **10,000** liver transplants, including a record **658** living donor transplants. In another milestone, there were more than **4,500** heart transplants, an increase of more than **10%** over 2022.

2022		2023
25,498 KIDNEYS		**27,332** KIDNEYS
9,528 LIVERS		**10,659** LIVERS
4,111 HEARTS		**4,540** HEARTS
2,692 LUNGS		**3,025** LUNGS

Over **6, 900** total living donor transplants in 2023.

Source: Unos.org - 2023 Data



AVERAGE SPECIFIC DEDUCTIBLE VS STOP LOSS REIMBURSEMENT BY STATE

To the right of each state icon on this page, you will find that state's average specific deductible followed by the average stop loss reimbursement above a policy's specific deductible in that state.

This data demonstrates that when a stop loss claim does occur, the total 1st dollar claim tends to exceed the deductible by a large amount in each state. For example, while TMHCC's policyholders in Florida purchase stop loss coverage at a $230,526 specific deductible on average, when a stop loss claim occurs, it exceeds the specific deductible by $165,105 on average, which is a significant amount. Similarly, in Washington, our average policyholder attaches at a $138,026 specific deductible and experiences an average stop loss claim of $154,054.

Average Specific Deductible

Average Stop Loss Reimbursement

AK
$139,655
$129,627

AL
$111,656
$87,116

AR
$151,458
$109,649

AZ
$235,328
$128,057

CA
$210,780
$196,123

CO
$138,679
$97,458

CT
$164,063
$151,067

DC
$214,583
$114,699

DE
$56,528
$68,704

FL
$230,526
$165,105

GA
$128,586
$105,071

HI
$200,000
$200,558

IA
$112,288
$82,973

ID
$67,500
$84,755

IL
$158,108
$113,164

IN
$124,446
$100,934

KS
$130,125
$96,629

KY
$134,878
$95,039

LA
$226,860
$94,067

MA
$139,543
$99,788

MD
$129,190
$89,048

ME
$69,733
$85,833

MI
$150,097
$129,563

MN
$114,696
$105,696

MO
$144,722
$112,246

MS
$140,642
$88,120

MT
$206,444
$134,944

NC
$122,509
$92,084

ND
$313,636
$138,354

NE
$115,496
$107,315

NH
$84,038
$75,471

NJ
$148,777
$92,179

NM
$115,667
$72,249

NV
$241,389
$170,974

NY
$166,078
$125,195

OH
$119,206
$103,589

OK
$165,135
$98,853

OR
$133,696
$78,246

PA
$141,085
$115,834

RI
$299,231
$153,952

SC
$131,000
$128,398

SD
$94,091
$120,806

TN
$133,106
$93,949

TX
$155,208
$127,745

UT
$168,944
$123,475

VA
$121,116
$122,658

VT
$69,857
$94,803

WA
$138,026
$154,054

WI
$155,107
$111,190

WV
$78,750
$67,710

WY
$81,111
$75,840

LEVERAGED TREND EXPLAINED

As plans budget for the next fiscal year, medical cost trend is undoubtedly a critical element of the planning process. New medical technologies, rising provider charges, and specialty pharmaceutical costs continue to cause health coverage expenses to rise faster than general inflation. Medical trend, along with deductible erosion, are the two factors that create leveraged trend, and unfortunately, medical stop loss insurance is not immune to these forces.

How does leveraged trend affect stop loss rates?

Suppose a self-funded plan has a $100,000 specific stop loss deductible. In year one, an employee has $300,000 in claims. The first $100,000 of the claims is paid by the self-funded plan. The remaining $200,000 is reimbursed by the medical stop loss policy.

Assume the following year's medical trend is 10%. For a similar claim, the employee's claim amount would increase from $300,000 to $330,000. But if the plan's specific deductible remains at $100,000, then the self-funded plan would still pay the first $100,000 of the claims, but the medical stop loss policy now reimburses the remaining $230,000 in claims – a 15% "leveraged trend" increase from the preceding year. In other words, 10% medical trend turns into 15% stop loss coverage trend at this specific deductible level. (The chart to the right shows leveraged trend at various specific deductibles based on TMHCC's experience.)

What can self-funded plans do to help manage the impact of leveraged trend?

Many self-funded employers find that increasing their specific deductible to match the annual trend expectations helps mitigate the cost impact of leveraged trend on their stop loss premiums.

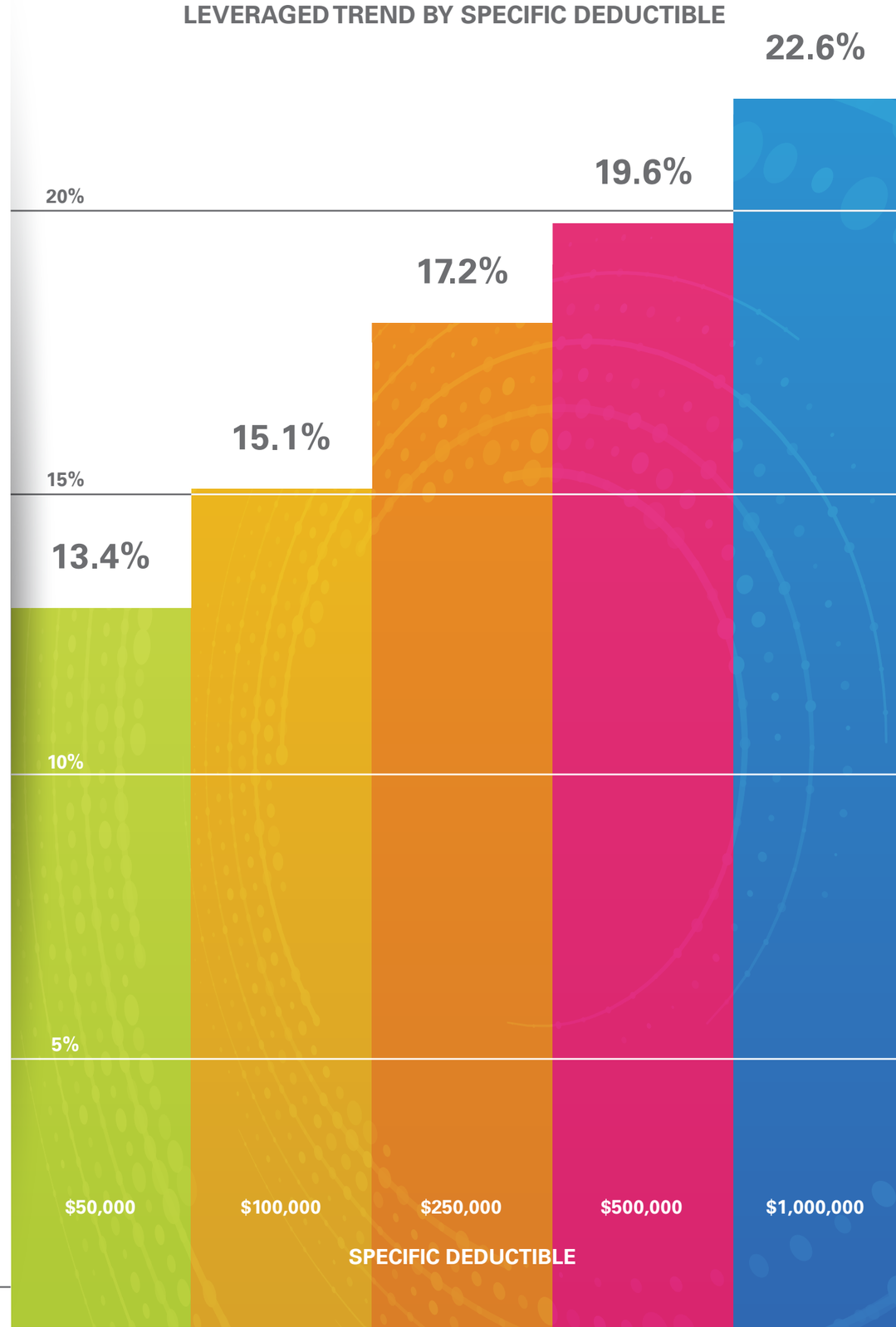
Raising your specific deductible could mean lower overall costs.

Each plan should be evaluated based on the size and risk tolerance of the employer. Plans should weigh the cost of the claims to be paid out of the plan against the cost of premiums for coverage of the medical stop loss claims.

YEAR 1
$300,000 - Total Claims
$100,000 - Specific Deductible

YEAR 2
$330,000 - Total Claims
$100,000 - Specific Deductible

10% Medical Trend turns into **15%** Stop Loss Coverage Trend



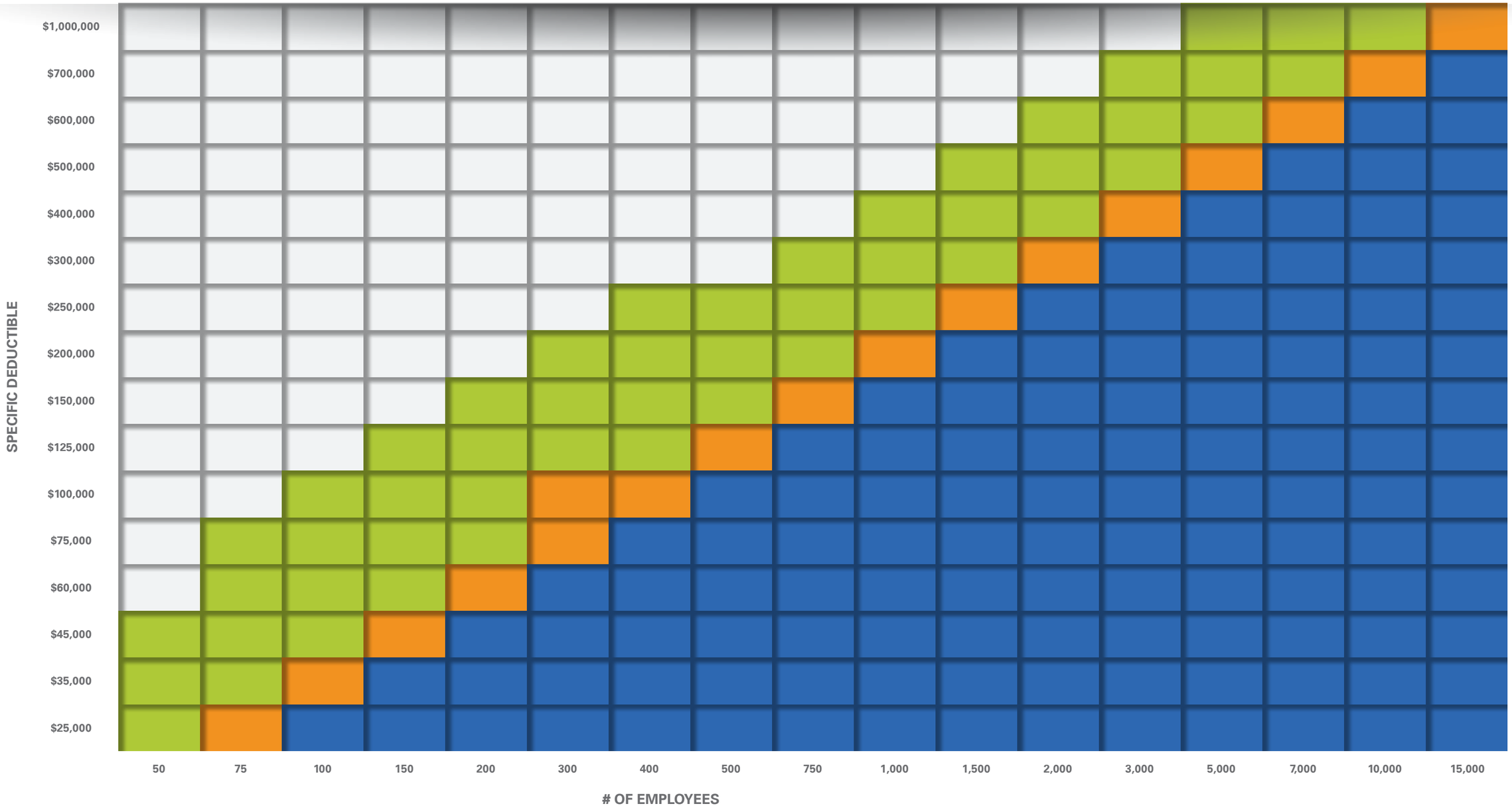
SPECIFIC DEDUCTIBLE THRESHOLDS

Expected Claims Frequency

The below chart is a tool that may be used in advising your clients on setting an appropriate specific deductible based on group size. We recognize that these thresholds depend on several variables besides group size – risk tolerance, industry, and profit margins, to name a few – however there are reasonable ranges most groups fall into by considering the expected frequency of stop loss claims.

Too many expected claims equates to higher premiums, and points towards the specific deductible being set too low. Too few claims indicates that the specific deductible could be set too high, putting the client in a risky position should several large claims occur below the stop loss plan's deductible.

- Risky Options (Under 2 claims)
- Acceptable Risk Options (6-8 claims)
- Optimal Risk Options (2-5 claims)
- Risky Options (9 or more claims)



COST CONTAINMENT SAVINGS

SPECIALTY CLAIMS UNIT (SCU) *SCU Nurses review clinical and claims data to identify high-dollar medical scenarios. This includes transplant, neonatal claims, cell and gene therapy, Rx, cardiac events and other high-dollar medical claims. They reduce these costs by accessing contracted facility rates which provide significant savings over network discounts.*

PRELIMINARY CLAIMS UNIT (PCU) *PCU impacts both pre and post-pay claims through the utilization of third-party vendors for bill review and/or negotiation.*

NEONATE BILLING ERROR SCU identified a claim for a neonate where the 14-day inpatient stay was billed at $91,474, but the facility was paid $1,192,711. The SCU Neonate nurse questioned both the TPA and network and was repeatedly told it was paid at a DRG and repriced correctly. After extensive investigation over a 5-month period, it was ultimately determined that the claim was repriced incorrectly and should have been paid at $91,474. The Policyholder received a refund of $1,100,964.

SPECIALTY CLAIMS UNIT (SCU) TRANSPLANT SUCCESS SCU was contacted by a TPA to review and place a transplant contract for a man with Multiple Myeloma at a large medical center. They placed a contract for an Autologous Stem Cell Transplant. The transplant occurred with multiple complications and an extended inpatient stay. The billed amount was $2,903,429 and the paid amount was $372,826. The realized savings based on the contracted terms was $2,530,603 (87%). The network discount would have been 45%.

Our Specialty Claims Nurses have extensive experience reviewing and placing contracts for high-dollar medical events. This knowledge helped create Transplant IQ (TIQ), a tool that leverages our nurses' expertise into an easy-to-use format that simplifies the comparison of transplant contracts.

PRELIMINARY CLAIMS UNIT (PCU) SUCCESS PCU received a review request for a claimant with lung cancer and severe emphysema who had a 37-day inpatient stay. The billed charges were $1,982,011 with a network discount of 14.60% and a paid amount of $1,692,548. PCU sent the claim to a third-party vendor for review – they found $293,248 in discrepant charges. These were removed from the bill and the paid amount was reduced to $1,399,300.

SUCCESS STORY

Data will be updated periodically. Continue to check back for updated information.

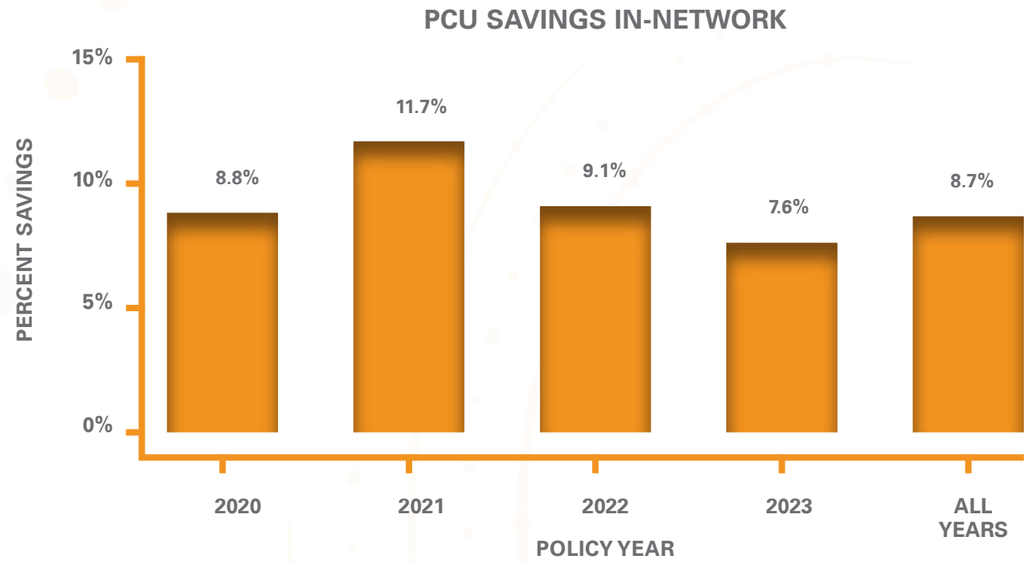
SAVINGS IN 2020-2023

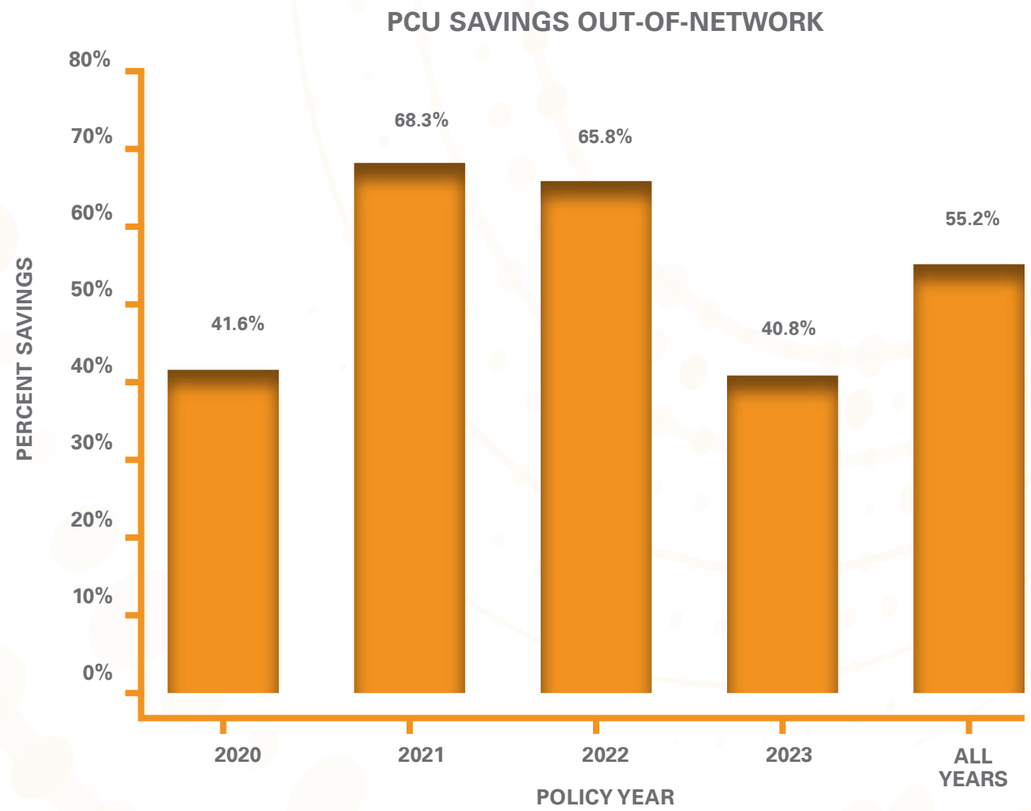
TRANSPLANT TOTAL SAVINGS
$34.5M

NON-TRANSPLANT TOTAL SAVINGS
$41.2M

GRAND TOTAL SAVINGS
$75.7M

AVERAGE SAVINGS PER YEAR
$18.9M





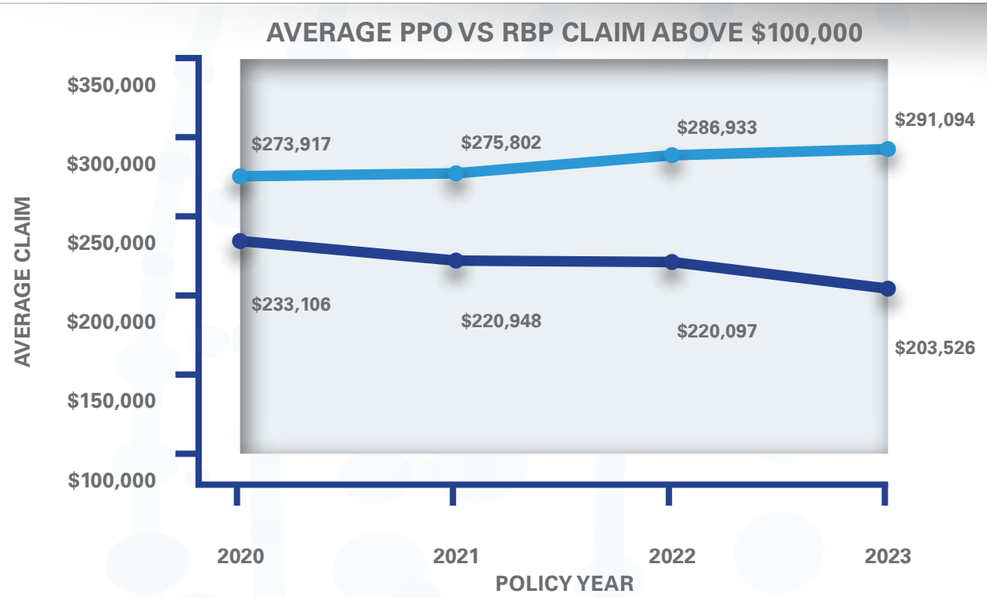
PROVIDER ARRANGEMENTS: PPO NETWORKS VS RBP PROGRAMS

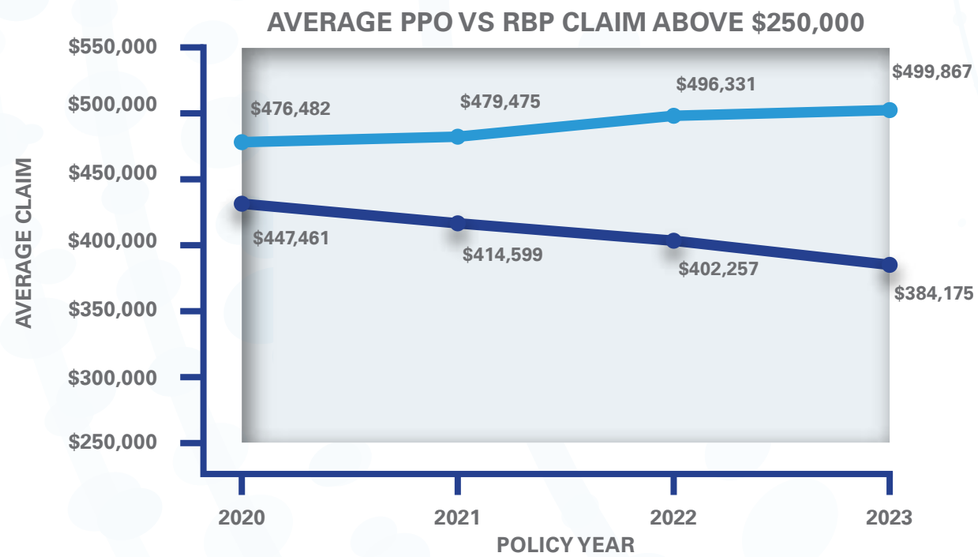
Another challenge your clients may encounter is deciding on provider arrangements, often choosing between a traditional Preferred Provider Organization (PPO) network and a Reference-Based Pricing (RBP) program. While a PPO is a network of providers with pre-negotiated service pricing, RBP programs do not involve provider network arrangements. Instead, RBP programs pay claims based on a percentage of a benchmark, often the Medicare Fee Schedule, which typically ends up with discounts much greater than traditional PPO plans.

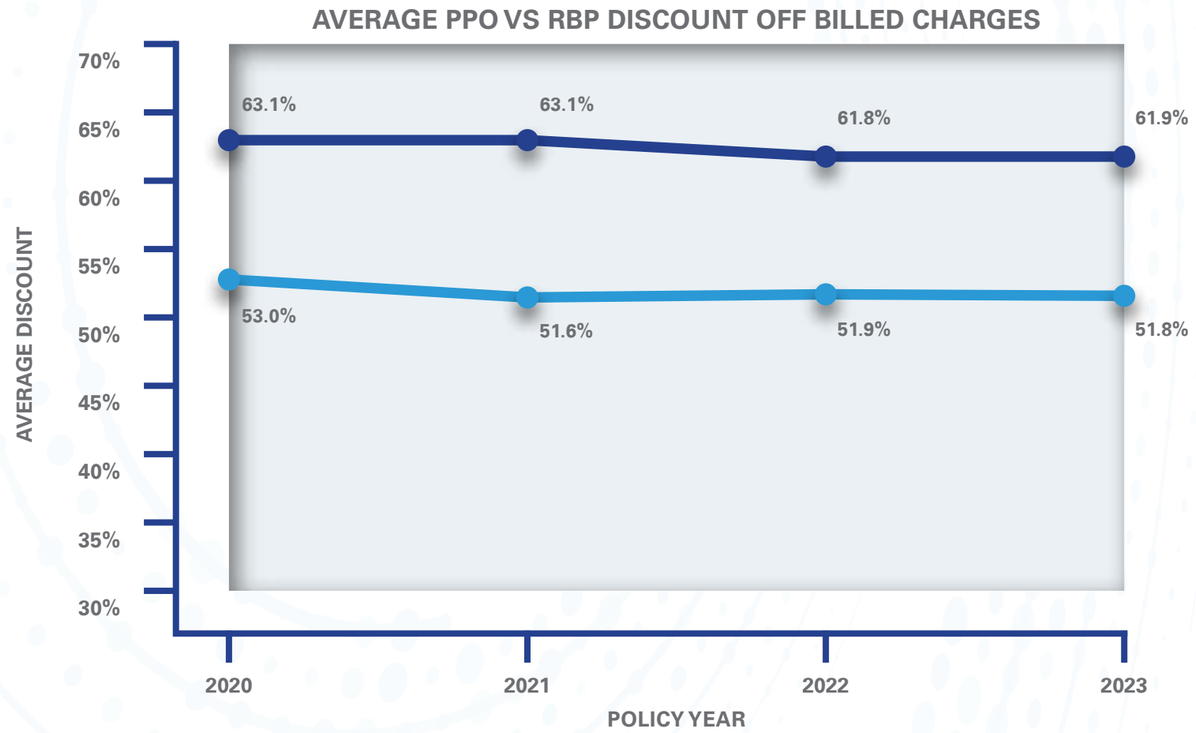
For RBP programs, employers may have concerns about the risk of patients receiving a balance bill, especially on non-emergency services. However, in most instances, this risk is largely offset by the program implementing repricing approaches such as setting case rates or safe harbor agreements, directing their covered members to RBP-friendly facilities, and practicing communication and education of covered members. Legal defense is typically provided as a final measure to assure patients do not end up having to pay a balance bill. Many self-funded plans are considering RBP programs in anticipation of substantial plan savings, which could be more than 30% savings on medical claims over their current network arrangement.

The below graphs on the left demonstrate the widening gap between TMHCC's average observed PPO versus RBP 1st dollar claim for claims above $100,000 and $250,000. While the average PPO claim amounts are increasing over time, the RBP claim amounts are much smaller and are actually decreasing. The graph on the right reflects our average observed network discount off billed charges, which hovers around 62%-63% for RBP programs and 52%-53% for PPO networks.

PPO Networks RBP Programs





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