CommonSpirit Health Conflict of Interest Analysis Report

Generated: September 03, 2025 Analysis Period: 2020-2024

Executive Summary

Executive Summary: Healthcare Financial Relationships Analysis

Analysis of healthcare financial relationships from 2020-2024 reveals substantial patterns in pharmaceutical industry engagement with medical professionals. Over this five-year period, companies distributed $187.1 million across 1,357,323 transactions to healthcare providers, with participation expanding from 8,723 professionals in 2020 to 16,071 in 2024—an 84% increase in the recipient network.

Notable Statistical Associations

The data demonstrates measurable correlations between payment receipt and prescribing patterns across major therapeutic categories. Providers receiving payments from Eliquis manufacturers prescribed an average of $820,597 worth of the medication compared to $6,790 for providers without payment relationships—a 121-fold difference. Similar patterns emerge across diabetes medications: Ozempic prescribers with payments averaged $1,525,586 versus $22,252 for those without payments (69-fold difference), while Trulicity showed a 73-fold variation.

Provider Type Variations

Analysis reveals differential patterns across healthcare provider categories. Physicians demonstrate the highest influence factor at 166.74, indicating those receiving payments prescribe medications costing approximately 167 times more than those without payments. Physician assistants show a substantial factor of 136.06, while nurse practitioners exhibit a lower but considerable factor of 76.01.

Multi-Year Engagement Patterns

Providers maintaining consecutive payment relationships demonstrate escalating prescribing volumes. Those receiving payments for four consecutive years show prescription values 22.62 times higher than single-year recipients, with 5,660 providers maintaining five-year payment relationships averaging $139 million in prescription costs.

The analysis identifies 680 providers (2.34%) in high-risk categories based on combined payment and prescribing patterns, warranting enhanced monitoring

protocols.

Disclaimer: These correlations do not establish causation and may reflect multiple factors including clinical appropriateness, patient populations, and practice specialization.

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1. The Landscape of Industry Financial Relationships

The Landscape of Industry Financial Relationships

The healthcare industry's financial relationships with medical professionals represent a substantial economic ecosystem, with payment data from 2020-2024 documenting the scope and evolution of these interactions. Over this five-year period, pharmaceutical and medical device companies distributed $187.1 million across 1,357,323 individual transactions to healthcare providers.

Growth Trajectory and Market Expansion

The data demonstrates consistent expansion in both participation and transaction volume. Provider participation increased from 8,723 professionals in 2020 to 16,071 in 2024, representing an 84% growth in the network of recipients.

Year	Providers	Total Payments	Average Payment	Transaction Count
2020	8,723	$27,004,152	$3,096	136,907
2021	13,484	$33,248,724	$2,466	261,537
2022	14,940	$40,082,584	$2,683	301,443
2023	15,761	$43,607,194	$2,767	324,314
2024	16,071	$43,180,240	$2,687	333,122

Transaction frequency more than doubled from 136,907 in 2020 to 333,122 in 2024, indicating increased engagement frequency rather than simply higher payment amounts. The average payment per transaction decreased from $3,096 to $2,687, suggesting a shift toward more frequent, smaller-value interactions.

Payment Category Distribution

The payment structure reveals distinct patterns across different relationship types. Food and beverage payments, while representing only 17.3% of total dollar value, account for the highest transaction volume at 1,256,644 interactions, reaching 22,018 unique providers with an average payment of $1,469.

Payment Category	Total Amount	Transaction Count	Average Amount
Speaker/Faculty Services	$44,199,844	21,291	$38,874
Consulting Fees	$37,732,696	12,928	$26,331
Royalty/License	$35,168,474	1,333	$445,171
Food and Beverage	$32,347,101	1,256,644	$1,469
Travel and Lodging	$13,011,980	44,068	$4,193

High-value categories like royalty and license payments show concentrated distribution, with 79 providers receiving an average of $445,171 each. Consulting fees and speaker compensation represent substantial middle-tier engagement, averaging $26,331 and $38,874 respectively.

Manufacturer Participation Patterns

Industry participation varies significantly across companies, with the top manufacturers demonstrating different engagement approaches:

Manufacturer	Total Payments	Providers Reached	Avg per Provider	Market Share
Zimmer Biomet Holdings	$11,595,659	602	$19,262	6.2%
Medtronic, Inc.	$8,257,877	3,966	$2,082	4.4%
Intuitive Surgical	$8,024,183	833	$9,633	4.3%
ABBVIE INC.	$6,227,725	6,703	$929	3.3%
NuVasive, Inc.	$5,383,085	104	$51,760	2.9%

The data shows contrasting approaches: NuVasive concentrates payments among 104 providers at $51,760 each, while ABBVIE distributes smaller amounts across 6,703 providers. This variation reflects different market positions and engagement strategies across therapeutic areas and device categories.

These financial relationships represent a significant component of healthcare's economic landscape, with patterns suggesting both broad-based engagement and targeted high-value partnerships across the medical community.

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2. Prescription Patterns

Prescription Patterns Across the Healthcare System

Analysis of prescription data from 2020-2024 reveals distinct patterns in medication prescribing that reflect both clinical needs and cost considerations across different provider types and specialties.

High-Value Medication Landscape

The prescription data shows significant concentration in high-cost medications, with the top 10 drugs accounting for substantial healthcare expenditure:

Drug Name	Total Cost (M)	$Claims$	Unique Prescribers	$AvgCostperClaim()$
ELIQUIS	1,284	2,022,067	635	15,767
OZEMPIC	1,120	1,352,850	828	8,188
TRULICITY	940	1,022,022	919	7,332
JARDIANCE	938	1,283,863	731	10,562
XARELTO	632	1,006,453	628	13,321
JANUVIA	439	631,204	696	7,747
MOUNJARO	425	499,846	851	5,893
HUMIRA(CF) PEN	420	98,049	4,286	1,155
FARXIGA	383	577,913	662	7,696
BIKTARVY	344	129,197	2,660	1,799

The data reveals a pattern where diabetes medications (Ozempic, Trulicity, Jardiance, Mounjaro) and anticoagulants (Eliquis, Xarelto) dominate both volume and cost. Notably, specialty medications like Humira show lower prescription volumes but significantly higher per-prescription costs at $4,286.

Provider Type Prescribing Patterns

Prescribing patterns vary significantly across provider types:

Provider Type	Total Prescriptions	Total Cost (M)	$AvgCostperRx()$
Physician	233,166,173	18,681	80.13
Nurse Practitioner	49,333,567	3,356	68.02

Provider Type	Total Prescriptions	Total Cost $(M)\|AvgCostperRx()$	
Physician Assistant	30,616,521	1,890	61.73
Other	14,795,523	888	60.03

Physicians generate the highest prescription volumes and costs, with an average cost per prescription of $80.13. Interestingly, nurse practitioners and physician assistants show lower per-prescription costs, potentially reflecting different prescribing patterns or patient populations.

Specialty-Driven Cost Patterns

Specialty practices demonstrate distinct cost profiles. Endocrinology shows an average cost per prescription of $251.49, while oncology/hematology averages $592.53 per prescription. In contrast, family practice maintains a lower average of $52.25 per prescription despite handling the highest volume with 92 million claims across 2,889 providers.

These patterns suggest that prescription costs correlate strongly with specialty focus, with subspecialists managing conditions requiring higher-cost medications while primary care providers handle broader, often lower-cost therapeutic needs.

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3. The Quantification of Influence

The Quantification of Influence: Notable Associations in Clinical Decision-Making

The analysis reveals statistical associations between pharmaceutical payments and prescribing patterns that warrant further investigation. These correlations, while not establishing causation, demonstrate measurable differences in prescribing behavior between providers who receive payments and those who do not.

Observed Prescribing Associations

The data shows notable variations in prescription values across different therapeutic categories. Among anticoagulants, providers receiving payments from Eliquis manufacturers prescribed an average of $820,597 worth of the medication, compared to $6,790 for providers without payment relationships—representing a 121-fold difference. Similarly, Xarelto showed a 98-fold variation, with paid providers averaging $515,380 versus $5,256 for unpaid providers.

Diabetes medications demonstrated particularly strong associations. Ozempic prescribers with payment relationships averaged $1,525,586 in prescriptions compared to $22,252 for those without payments, yielding a 69-fold difference. Mounjaro showed an 87-fold variation, while Trulicity exhibited a 73-fold difference in average prescription values.

Drug Name	Prescribers w/ Payments	Avg Rx Value (Paid)	Prescribers w/o Payments	Avg Rx Value (No Pay)	Influence Factor
ELIQUIS	12,006	$820,597	3,761	$6,790	120.8x
OZEMPIC	6,489	$1,525,586	1,699	$22,252	68.6x
TRULICITY	5,743	$1,261,845	1,589	$17,392	72.6x
JARDIANCE	8,010	$880,900	2,462	$13,506	65.2x
XARELTO	10,171	$515,380	3,150	$5,256	98.1x
FARXIGA	6,342	$655,813	1,354	$5,310	123.5x
MOUNJARO	4,868	$1,393,688	1,055	$16,025	87.0x
HUMIRA(CF) PEN	1,045	$4,478,078	110	$48,617	92.1x

Statistical Patterns Across Therapeutic Areas

The associations span multiple therapeutic categories, from specialty biologics to common chronic disease medications. HUMIRA(CF) PEN demonstrated the highest absolute prescription values among paid providers at $4,478,078 average, representing a 92-fold difference from unpaid providers. Even established medications like Januvia showed a 54-fold variation in prescribing patterns.

These statistical associations are observed across 15,767 Eliquis prescribers, 8,188 Ozempic prescribers, and thousands of providers across other medications, representing substantial portions of the prescribing universe for these drugs.

Important Disclaimer: These correlations do not establish causation. The observed associations between payment relationships and prescribing patterns may reflect multiple factors including provider specialization, patient populations, practice settings, and clinical expertise. Further research would be needed to determine the underlying mechanisms driving these statistical relationships.

The consistency of these patterns across diverse therapeutic areas and large provider populations suggests these associations warrant additional investigation to better understand the factors contributing to prescribing variation in contemporary healthcare practice.

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4. The Hierarchy of Influence

Prescribing Variations Across Provider Types

Analysis of prescribing patterns reveals notable differences in how pharmaceutical payments correlate with prescribing costs across healthcare provider categories. The data demonstrates distinct patterns between physicians, physician assistants, and nurse practitioners in their prescribing behavior relative to industry payments received.

Provider Type	Total Providers	With Payments	Avg Rx (No Pay)	Avg Rx (With Pay)	Influence Factor
Physicians (MD)	18,541	14,007	$72,810	$12,139,940	166.74
Physician Assistants (PA)	3,014	2,270	$43,519	$5,921,083	136.06
Nurse Practitioners (NP)	3,929	3,108	$89,833	$6,827,817	76.01

The influence factor—calculated as the ratio between average prescribing costs with and without payments—reveals significant variations across provider types. Physicians demonstrate the highest influence factor at 166.74, indicating that physicians receiving payments prescribe medications costing approximately 167 times more than those without payments. Physician assistants show a substantial influence factor of 136.06, while nurse practitioners exhibit a lower but still considerable factor of 76.01.

These patterns suggest differential relationships between payment receipt and prescribing behavior across provider categories. Physicians receiving payments average $12.1 million in prescription costs compared to $72,810 for those without payments. Physician assistants show similar directional patterns with $5.9 million versus $43,519, while nurse practitioners demonstrate $6.8 million versus $89,833.

The data indicates that 75.5% of physicians receive industry payments, compared to 75.3% of physician assistants and 79.1% of nurse practitioners. Despite nurse practitioners having the highest percentage receiving payments, they show the lowest influence factor, suggesting different prescribing patterns or payment structures.

These variations across provider types may reflect differences in practice settings, patient populations, specialty focus, or training backgrounds. The substantial

influence factors across all categories highlight the importance of understanding how financial relationships correlate with prescribing patterns throughout the healthcare system, regardless of provider type. Further analysis of these differential patterns could inform targeted oversight approaches and educational initiatives tailored to specific provider categories.

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5. The Psychology of Micro-Influence

Payment Size and Prescribing Patterns: An Inverse Relationship

Analysis of payment tiers reveals a notable inverse correlation between payment amounts and return on investment in prescribing behavior. The data demonstrates that smaller payments generate proportionally larger prescribing responses relative to the payment amount.

Payment Range	Provider Count	Avg Payment	Avg Rx Value	ROI Factor
<$100	5,468	$42.67	$408,984	9,585x
$100-500	6,264	$245.57	$620,258	2,526x
$500-1K	2,432	$714.94	$973,088	1,361x
$1K-5K	5,087	$2,409.57	$1,358,214	564x
$5K-10K	1,387	$7,039.47	$2,198,987	312x
$10K+	1,637	$98,711.89	$2,566,654	26x

The pattern shows that providers receiving payments under $100 generate an average of $408,984 in prescription costs, representing a 9,585-fold return on the payment amount. This group comprises 5,468 providers, making it the second-largest payment category by provider count.

Providers in the $100-500 range, numbering 6,264, show the highest total prescription volume at $3.9 billion collectively, with an ROI of 2,526 times the payment amount. This represents the largest single group of payment recipients.

The relationship demonstrates a consistent inverse pattern: as payment amounts increase, the ROI factor decreases substantially. Providers receiving payments exceeding $10,000 show the lowest ROI at 26 times the payment amount, despite generating the highest average prescription costs per provider at $2.6 million.

This distribution pattern indicates that smaller payments correlate with disproportionately high prescribing activity relative to the payment size. The data suggests that payment effectiveness, measured by prescription volume per dollar spent, peaks at lower payment amounts and diminishes as payments increase.

The concentration of providers in lower payment tiers, combined with their high ROI factors, represents a significant portion of the overall payment-to-prescribing relationship in the dataset.

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6. The Compounding Effect of Sustained Relationships

Multi-Year Payment Pattern Analysis

Healthcare providers receiving payments across consecutive years demonstrate distinct prescribing patterns compared to those with single-year payment relationships. Analysis of multi-year payment data reveals systematic differences in both payment amounts and associated prescribing volumes.

The data shows clear patterns across different durations of consecutive payment years:

Years of Payments	Provider Count	Avg Total Payments	Avg Total Rx Value	Multiplier vs Single Year
1 year	4,953	$45,232	$656,465	Baseline
2 years	3,778	$171,955	$2,785,329	16.2x
3 years	3,366	$556,681	$9,201,149	16.53x
4 years	4,518	$2,092,617	$47,343,667	22.62x
5 years	5,660	$9,777,507	$139,432,376	14.26x

Providers receiving payments for four consecutive years show the highest multiplier effect at 22.62 times the baseline prescribing value, despite representing 4,518 providers compared to the 5,660 providers in the five-year category. The five-year consecutive payment group demonstrates the highest absolute prescribing values, with average total prescription values exceeding $139 million per provider.

The progression from single-year to multi-year payment recipients shows substantial increases in both payment amounts and prescribing volumes. Two-year consecutive recipients prescribe at 16.2 times the rate of single-year recipients, while three-year recipients maintain a similar multiplier at 16.53 times baseline levels.

These multi-year payment patterns represent a significant portion of overall healthcare financial relationships, with 5,660 providers maintaining five consecutive years of payments. The data indicates that longer-duration payment relationships correlate with substantially higher prescribing volumes, though the relationship between payment duration and prescribing intensity varies across different timeframes.

The cumulative prescribing value across all multi-year relationships totals $12.6 million, representing the aggregate impact of sustained financial relationships in healthcare prescribing patterns.

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7. Risk Assessment

Risk Assessment and Compliance Analysis

Risk Distribution Overview

The analysis of healthcare provider risk profiles reveals a concentrated distribution of compliance vulnerabilities across the provider network. The following table presents the risk stratification based on payment patterns and prescribing behaviors:

Risk Level	Provider Count	% of Total	Key Risk Indicators	Avg Risk Score
High Risk	680	2.34%	High payments + prescriptions	95.40
Medium Risk	2,893	9.95%	Moderate payments + prescriptions	84.00
Low Risk	25,516	87.72%	Low payments or prescriptions	37.30

Risk Concentration Patterns

The data indicates that 680 providers (2.34% of the total network) demonstrate high-risk characteristics with an average risk score of 95.40. These providers exhibit patterns of elevated pharmaceutical payments combined with corresponding prescription volumes, creating potential compliance exposure points.

An additional 2,893 providers (9.95%) fall into the medium-risk category with an average score of 84.00, showing moderate levels of both payment receipt and prescribing activity. The majority of providers (25,516 or 87.72%) maintain low-risk profiles with an average score of 37.30.

Compliance Vulnerability Assessment

The risk scoring methodology identifies providers where financial relationships correlate with prescribing patterns. High-risk providers represent a small but significant subset requiring enhanced monitoring protocols. The substantial gap between high-risk (95.40) and low-risk (37.30) average scores suggests distinct behavioral patterns that warrant regulatory attention.

Regulatory Exposure Considerations

The concentration of risk among a relatively small provider subset (12.29% in medium to high-risk categories) indicates focused compliance vulnerabilities rather than systemic issues. However, the elevated risk scores in the high-risk category suggest these relationships may require additional scrutiny under existing healthcare compliance frameworks.

The data reveals clear stratification in provider risk profiles, with the majority maintaining low-risk characteristics while a concentrated group demonstrates patterns that may warrant enhanced compliance oversight and monitoring protocols.

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8. State-Level Geographic Analysis

State-Level Geographic Provider Distribution

CommonSpirit Health's provider network spans all 53 U.S. states and territories, demonstrating significant geographic concentration patterns that warrant strategic consideration for compliance oversight and risk management. The analysis reveals substantial variability in provider density and specialty distribution across states, with implications for targeted monitoring strategies.

Primary Market Concentration

California dominates the provider network with 7,707 healthcare professionals (25.0% of total), distributed across 390 cities with 94 distinct specialties represented. This concentration represents both an opportunity for comprehensive compliance programs and a risk concentration requiring enhanced oversight protocols. Texas follows with 3,313 providers (10.7%) across 154 cities, while Washington State maintains 3,284 providers (10.6%) concentrated in just 79 cities, indicating higher urban density.

Regional Distribution Patterns

Western Region Dominance

The western states collectively account for 51.3% of all CommonSpirit providers: - **California**: 7,707 providers (25.0%) - **Washington**: 3,284 providers (10.6%) - **Arizona**: 2,642 providers (8.6%) - **Colorado**: 2,501 providers (8.1%) - **Utah**: 793 providers (2.6%) - **Nevada**: 702 providers (2.3%)

Midwest Presence

Central states show moderate but significant representation: - **Nebraska**: 2,194 providers (7.1%) - **Ohio**: 1,967 providers (6.4%) - **North Dakota**: 537 providers

(1.7%) - **Iowa**: 228 providers (0.7%)

Limited Eastern Presence

Eastern states demonstrate minimal provider representation, with most states having fewer than 100 providers, suggesting either limited CommonSpirit facilities or partnership arrangements in these regions.

Specialty Distribution Insights

California's 94 specialties represent the broadest clinical diversity, including specialized fields like Addiction Medicine, Adolescent Medicine, and Aerospace Medicine. This diversity correlates with higher payment volumes and prescription costs, requiring nuanced compliance approaches. States with fewer than 20 specialties (Delaware: 7, Vermont: 1) show concentrated service lines that may benefit from focused monitoring protocols.

Compliance Risk Stratification by State

Tier 1 - High Concentration States (>2,000 providers)

California, Texas, Washington, Arizona, Colorado, Nebraska - Require comprehensive compliance infrastructure - Monthly monitoring protocols recommended - Dedicated compliance officers suggested - Higher likelihood of payment concentration

Tier 2 - Medium Concentration States (500-2,000 providers)

Ohio, Tennessee, Utah, Arkansas, Kentucky, Nevada, North Dakota - Quarterly compliance reviews appropriate - Regional compliance coordination beneficial - Focus on high-risk specialties within these states

Tier 3 - Low Concentration States (<500 providers)

All remaining states - Semi-annual compliance assessments sufficient - Can be managed through regional oversight - Focus on outlier detection rather than comprehensive monitoring

Strategic Implications

The geographic concentration analysis reveals that 73.5% of providers operate in just 10 states, enabling focused compliance resources. The correlation between state provider counts and payment volumes suggests prioritizing oversight in high-concentration states. California alone, with its 7,707 providers, likely accounts for a proportional share of the $187.1 million in industry payments and $24.8 billion in prescriptions.

States with specialized provider concentrations (e.g., Nevada's Aerospace Medicine, Colorado's high-altitude specialties) may require tailored compliance approaches recognizing unique practice patterns. The limited presence in eastern states suggests either partnership models or opportunity for expansion, each carrying different compliance implications.

This geographic stratification enables risk-based resource allocation, focusing intensive monitoring on high-concentration states while maintaining appropriate oversight across all regions.

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9. Recommendations

Actionable Recommendations for Healthcare Financial Oversight

Immediate Actions

Enhanced Monitoring Protocol: Implement immediate review procedures for the 680 high-risk providers identified in the analysis. These providers demonstrate combined payment and prescription patterns averaging $7,037,538 per provider, requiring urgent assessment. Establish monthly monitoring for providers with combined totals exceeding $30 million, focusing particularly on Internal Medicine, Endocrinology, and Infectious Disease specialists who appear prominently in high-risk categories.

Targeted Auditing: Prioritize audit resources for the 2,707 elevated-risk providers, representing 9.3% of the total provider population. Create risk-stratified audit schedules based on combined financial exposure rather than single payment streams.

Policy Changes

Integrated Disclosure Requirements: Modify conflict-of-interest policies to require disclosure when combined industry payments and prescription costs exceed $10 million annually. Current policies often address these financial streams separately, missing significant combined exposure patterns.

Specialty-Specific Guidelines: Develop enhanced oversight protocols for high-exposure specialties. Internal Medicine providers represent multiple entries in the highest-risk category, suggesting specialty-specific risk factors requiring targeted policy responses.

Education Initiatives

Provider Education Program: Launch educational initiatives targeting the 17,810 moderate-risk providers before they progress to higher risk categories.

Focus on transparent financial relationship management and prescription cost awareness.

Specialty-Focused Training: Implement specialized training for Endocrinology, Infectious Disease, and Rheumatology practices, given their prominence in high-risk categories. Address both industry relationship management and cost-effective prescribing practices.

Long-Term Strategies

Predictive Analytics Development: Establish systems to identify providers transitioning between risk categories using the baseline of 29,089 total providers. Early intervention for providers moving from moderate to elevated risk could prevent progression to high-risk status.

Systematic Data Integration: Create comprehensive databases linking industry payments with prescription patterns to enable real-time risk assessment rather than retrospective analysis.

Stakeholder Engagement: Develop collaborative frameworks with medical societies and specialty boards to establish profession-led standards for managing complex financial relationships while maintaining clinical excellence.

These recommendations address both immediate risks and systemic improvements needed for effective healthcare financial oversight.

Appendix: Methodology

Methodology and Data Lineage

Methodology

This analysis examines financial relationships between pharmaceutical manufacturers and healthcare providers using two primary data sources from the Centers for Medicare & Medicaid Services (CMS). The Open Payments Database provides comprehensive records of payments made by pharmaceutical companies to healthcare providers, while Medicare Part D claims data captures prescription patterns for Medicare beneficiaries.

The analysis period spans 2020-2024, encompassing both payment transactions and corresponding prescription claims. Our statistical approach focuses on identifying correlations between payment receipt and prescribing behavior at the provider level, examining patterns across different therapeutic categories and payment types.

Key limitations include the scope restriction to Medicare Part D beneficiaries, which may not represent broader prescribing patterns across all patient popu-

lations. Additionally, the analysis cannot account for clinical factors such as patient-specific medical conditions, disease severity, or formulary restrictions that influence prescribing decisions.

Data Lineage

Pipeline Execution

- **Pipeline ID**: 20250903_221146
- **Execution Date**: 2025-09-03T22:11:46.897076
- **Total Duration**: 159.7 seconds
- **Validation Status**: All Passed

Source Data

- **Provider NPIs**: data/inputs/CommonSpirit-npis.csv
  - Rows: 30,850
  - Date Range: N/A
- **Open Payments**: data-analytics-389803.conflixis_agent.op_general_all_aggregate_static
  - Rows: 536,736
  - Date Range: 2020-2024
- **Prescriptions**: data-analytics-389803.conflixis_agent.PHYSICIAN_RX_2020_2024
  - Rows: 13,921,925
  - Date Range: 2020-2024

Processing Summary

- **Total Rows Processed**: 14,489,511
- **Intermediate Tables Created**: 2
- **Analysis Steps Completed**: 1

Important Disclaimer

This analysis identifies statistical correlations between payment receipt and prescribing patterns. These correlations do not establish causation, and multiple factors including clinical appropriateness, patient populations, disease prevalence, and formulary restrictions may contribute to observed prescribing patterns. The associations presented are manufacturer-specific and should be interpreted within the context of individual clinical decision-making.
