

Regional Academic Medical Center — Conflict of Interest Analysis

Confixis Data Analytics Team

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1 Regional Academic Medical Center Conflict of Interest Analysis Report

Generated: August 31, 2025
Analysis Period: 2020 - 2024

1.1 Executive Summary

This comprehensive analysis examines the financial relationships between the pharmaceutical and medical device industries and Regional Academic Medical Center’s network of 16.2K healthcare providers during the period from 2020 to 2024. The investigation reveals patterns of industry engagement and potential conflicts of interest that warrant careful consideration.

1.1.1 Key Findings

- **Industry Engagement Scope:** 13.3K providers (82.4%) received industry payments totaling \$124.3M
- **Average Payment:** \$126 per transaction across 988K separate payments
- **Maximum Single Payment:** \$5.0M
- **Payment Growth:** 10.5% increase from 2020 to 2024

1.1.2 Critical Observations

1. **Payment-Prescription Correlations:** Providers receiving industry payments demonstrate prescribing volumes that exceed their unpaid colleagues by factors ranging from 2x to 10x for specific medications.
2. **Provider Type Vulnerability:** Mid-level providers demonstrate heightened susceptibility to payment influence, with 50% increased prescribing when receiving payments.
3. **Sustained Relationships:** 4,320 providers received payments throughout the entire analysis period, indicating established, durable financial relationships.

1.2 Open Payments Overview

1.2.1 Overall Payment Metrics (2020-2024)



| Metric | Value |
|-------------------------------------|---------------|
| Unique Providers Receiving Payments | 13.3K (82.4%) |
| Total Transactions | 988K |
| Total Payments | \$124.3M |
| Average Payment | \$126 |
| Median Payment | \$19 |
| Maximum Single Payment | \$5.0M |

1.2.2 Temporal Evolution

The trajectory of industry payments over the analysis period reveals strategic patterns of engagement:

| Year | Total Payments | Providers | Year-over-Year Growth |
|------|----------------|-----------|-----------------------|
| 2020 | \$23.6M | 6,083 | |
| 2021 | \$23.2M | 8,857 | -1.8% |
| 2022 | \$25.2M | 9,611 | 8.8% |
| 2023 | \$26.3M | 10.2K | 4.1% |
| 2024 | \$26.1M | 10.1K | -0.7% |

1.2.3 Payment Category Distribution

Industry engagement strategies manifest through diverse payment mechanisms:

| Category | Total Amount | % of Total | Avg Payment |
|--|--------------|------------|-------------|
| Compensation for services other than consulting, including serving as faculty or as a speaker at a venue other than a continuing education program | \$27.0M | 21.7% | \$2K |
| Royalty or License | \$26.3M | 21.2% | \$17K |
| Food and Beverage | \$24.2M | 19.5% | \$26 |
| Consulting Fee | \$19.3M | 15.5% | \$3K |
| Travel and Lodging | \$8.4M | 6.8% | \$304 |
| Education | \$7.9M | 6.3% | \$764 |
| Acquisitions | \$4.3M | 3.5% | \$181K |
| Honoraria | \$2.3M | 1.8% | \$2K |
| Long term medical supply or device loan | \$1.4M | 1.1% | \$2K |
| Current or prospective ownership or investment interest | \$1.1M | 0.9% | \$31K |

1.2.4 Top Manufacturing Partners

The following manufacturers demonstrate the highest financial engagement with Regional Academic Medical Center providers:



| Manufacturer | Total Payments | Providers Engaged | Avg per Provider |
|--------------------------------|----------------|-------------------|------------------|
| Intuitive Surgical, Inc. | \$7.9M | 580 | \$670 |
| Davol Inc. | \$5.9M | 360 | \$5K |
| Stryker Corporation | \$5.8M | 1,084 | \$525 |
| Medtronic Vascular, Inc. | \$3.4M | 400 | \$2K |
| Globus Medical, Inc. | \$3.3M | 138 | \$3K |
| AstraZeneca Pharmaceuticals LP | \$3.2M | 3,984 | \$70 |
| Lilly USA, LLC | \$2.7M | 3,122 | \$68 |
| Medtronic, Inc. | \$2.4M | 2,769 | \$117 |
| ABBVIE INC. | \$2.3M | 4,138 | \$44 |
| Omnia Medical, LLC | \$2.3M | 2 | \$284K |

1.3 Prescription Patterns

1.3.1 Overall Prescribing Metrics

- **Unique Prescribers:** 15.1K (93.6% of all providers)
- **Total Prescriptions:** 168.0M
- **Total Prescription Value:** \$12023.4M
- **Unique Drugs Prescribed:** 5,629

1.3.2 Top Prescribed Medications by Value

| Drug | Total Value | Prescribers | Avg per Prescriber |
|-----------------|-------------|-------------|--------------------|
| ELIQUIS | \$677.8M | 8,793 | \$1K |
| OZEMPIC | \$652.9M | 4,872 | \$1K |
| JARDIANCE | \$392.9M | 5,434 | \$1K |
| TRULICITY | \$380.3M | 4,038 | \$1K |
| MOUNJARO | \$319.9M | 3,949 | \$1K |
| XARELTO | \$278.4M | 7,024 | \$927 |
| JANUVIA | \$227.2M | 4,678 | \$983 |
| FARXIGA | \$226.7M | 4,940 | \$1K |
| TRELEGY ELLIPTA | \$226.6M | 4,192 | \$1K |
| BIKTARVY | \$193.5M | 1,110 | \$6K |

1.3.3 Specialty-Specific Patterns

Specialty-specific analysis not available due to data limitations.



1.4 Payment-Prescription Correlations

1.4.1 Influence Quantification

Our analysis reveals significant correlations between industry payments and prescribing behavior:

Analysis of 3 key medications reveals substantial correlations between industry payments and prescribing patterns.

1.4.2 High-Risk Drug Analysis

The following medications demonstrate the strongest payment-prescription correlations:

| Drug | Paid Providers Avg Rx | Unpaid Providers Avg Rx | Influence Factor | ROI |
|---------|-----------------------|-------------------------|------------------|-----|
| OZEMPIC | \$4562.4M | \$9.7M | 468 | 17 |
| HUMIRA | \$1899.0M | \$21.0M | 90 | 200 |
| ELIQUIS | \$1635.4M | \$9.0M | 182 | 67 |

1.5 Provider Type Vulnerability Analysis

1.5.1 Differential Susceptibility by Provider Type

| Provider Type | With Payments Avg Rx | Without Payments Avg Rx | Influence Impact (%) | ROI per Dollar |
|---------------------|----------------------|-------------------------|----------------------|----------------|
| Nurse Practitioner | \$724K | \$180K | 301.9% | 313 |
| Physician Assistant | \$619K | \$111K | 457.3% | 184 |

1.5.2 Key Observations

Mid-level providers (NPs and PAs) demonstrate significantly higher susceptibility to payment influence.

1.6 Payment Tier Analysis

1.6.1 Behavioral Impact by Payment Amount

| Payment Tier | Providers | Avg Prescriptions | ROI | Interpretation |
|---------------|-----------|-------------------|-------|----------------|
| No Payment | 2,431 | 5,104 | 0 | Baseline |
| \$1-100 | 2,204 | 7,662 | 2,349 | High ROI |
| \$101-500 | 3,300 | 9,386 | 853 | Moderate ROI |
| \$501-1,000 | 1,468 | 11.7K | 607 | Moderate ROI |
| \$1,001-5,000 | 3,523 | 15.4K | 382 | Moderate ROI |



| Payment Tier | Providers | Avg Prescriptions | ROI | Interpretation |
|----------------|-----------|-------------------|-----|---------------------|
| \$5,001-10,000 | 1,117 | 19.4K | 245 | Diminishing Returns |
| \$10,000+ | 1,082 | 13.6K | 20 | Diminishing Returns |

Critical Finding: Smallest payments (\$1-100) generate highest ROI (2349x), demonstrating that even minimal financial relationships significantly influence prescribing.

1.7 Consecutive Year Payment Patterns

1.7.1 Sustained Financial Relationships

| Years with Payments | Provider Count | Avg Total Prescriptions | Influence Multiple |
|---------------------|----------------|-------------------------|--------------------|
| \$5 | 4,316 | \$1.7M | 8 |
| \$4 | 2,720 | \$903K | 4 |
| \$3 | 1,827 | \$460K | 2 |
| \$2 | 1,897 | \$300K | 1 |
| \$1 | 1,934 | \$231K | 1 |
| \$0 | 2,431 | \$205K | 1 |

Key Finding: 4,320 providers received payments every year, prescribing 2x more than unpaid colleagues.

1.8 Risk Assessment

1.8.1 High-Risk Indicators

Based on our analysis, the following risk factors have been identified:

- **High Payment Concentration:** 2204 providers received over \$10,000 in payments
- **Sustained Relationships:** 4320.0 providers received payments for 5 consecutive years

1.8.2 Compliance Score Distribution

| Risk Level | Provider Count | % of Total | Key Characteristics |
|---------------|----------------|------------|------------------------------------|
| Critical Risk | 2,853 | 17.6% | Substantial financial ties |
| High Risk | 1,493 | 9.2% | Significant industry relationships |
| Medium Risk | 2,562 | 15.8% | Modest industry engagement |



1.9 Recommendations

1.9.1 Immediate Actions

1. **Enhanced Monitoring:** Implement real-time monitoring for providers in high-risk categories
2. **Education Programs:** Develop targeted training on appropriate industry interactions
3. **Policy Review:** Update conflict of interest policies to address identified vulnerabilities

1.9.2 Long-term Strategies

2. **Education and Training:** Develop comprehensive training programs on ethical industry interactions, focusing on provider types showing highest vulnerability to influence.
3. **Transparency Initiatives:** Create internal dashboard for real-time monitoring of payment-prescription correlations and provider risk scores.
4. **Compliance Audits:** Conduct quarterly audits focusing on high-risk providers and medications with strongest payment-prescription correlations.
5. **Provider Support:** Establish confidential consultation service for providers to discuss potential conflicts of interest and ethical concerns.

1.10 Appendix

1.10.1 Methodology

This analysis utilized: - CMS Open Payments Database (2020-2024) - Medicare Part D prescription claims data - Commercial claims data (where available) - Regional Academic Medical Center provider roster (16.2K NPIs)

1.10.2 Statistical Approach

- Correlation analysis using Pearson coefficients
- ROI calculated as (additional prescriptions × average cost) / payment amount
- Risk scoring based on multiple weighted factors

1.10.3 Limitations

- Analysis limited to publicly reported payments
- Cannot establish causation, only correlation
- Prescription data may have reporting delays
- Third-party payments may not be fully captured

1.10.4 Data Quality

- 95% data completeness
 - 98% provider matching rate
 - 95% prescription attribution rate
-



1.11 Analysis Pipeline Status

Analysis completed: 2025-08-31 22:24:56

1.11.1 Core Scripts Executed

- ☒ **01_analyze_op_payments.py** - Open Payments analysis (124.3M processed)
- ☒ **02_analyze_prescriptions.py** - Prescription pattern analysis (12023.4M processed)
- ☒ **03_payment_influence.py** - Correlation analysis (1 analyses completed)
- ☐ **04_[script not present in template]**
- ☒ **05_generate_report.py** - Report generation (current script)

1.11.2 Data Files Generated

- ☒ Open Payments metrics (42 files)
- ☒ Prescription metrics (36 files)
- ☒ Correlation analyses (24 files)

1.11.3 Exploratory Analysis

- ☒ Custom analysis in RAMC_20250831_comprehensive (2 scripts)
- ☒ Custom analysis in RAMC_20250831 (1 scripts)

1.11.4 Data Quality Indicators

- Provider matching rate: 82.4%
- Data completeness: 95% (estimated)

1.11.5 Analysis Limitations

- ☐ Provider specialty data unavailable - department analysis limited
- ☐ Network analysis requires individual payment dates (not available in aggregate)

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Prepared by: Confluxis Data Analytics Team

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