# Optum

# John Muir Health improves coding and CDI efficiency

John Muir Health implemented the comprehensive Optum® Enterprise and Optum® Professional Computer-Assisted Coding (CAC) and Clinical Documentation Improvement (CDI) 3D solution. Since the transition, John Muir Health continues to see significant advancements in clinical intelligence and workflow automation.

## Mounting challenges with existing coding and CDI processes

John Muir Health faced the following challenges with their existing coding and CDI workflow processes:

- Lack of integrated middle revenue cycle technology and advanced data analytics
- Existing CAC and CDI solution was intended to address ICD-10 transition versus renewed focus on labor productivity, workflow efficiency and accurate revenue integrity

They wanted an integrated CDI and coding technology that would provide actionable solutions to:

- Flag cases needing prioritization review in the CDI and coding workflow
- Increase automation to reduce manual processes and detect problems related to physician coding
- Provide actionable reporting data to help eliminate costly rework and reduce strain on staff
- Enhance case coverage so CDI teams could expand case reviews beyond existing Medicare and select payers
- Improve collaboration between coding and CDI teams

## Collaborating with Optum on smart solutions

John Muir Health replaced its legacy systems with Optum CAC and CDI technology that leverages proprietary natural language processing (NLP). Optum NLP compares more than 10 million medical facts, reads physician documentation, understands grammar and syntax, identifies key facts and maps those facts to codes. The NLP algorithm is continually learning and improving to help teams accomplish more tasks and ensure 100% chart review. Coding teams can provide better feedback to providers, explain changes to patient documentation, and produce more accurate claims with less lag time.

**John Muir Health is a leading health care system serving the San Francisco Bay community for over 25 years.**

**The system offers:**

- Two large medical centers in Contra Costa County (817 beds total)
- Neurosciences, orthopedics, cancer care, cardiovascular care, high-risk obstetrics
- Designated trauma center for Contra Costa County
- One of the largest physician networks in Northern California — John Muir Health Physician Network — with 900 primary care and specialty physicians
- Outpatient services and urgent care centers throughout community

| Commercial Capture Rate Baseline (2019) | Commercial Capture Rate (2022) | Medicare Capture Rate Baseline (2019) | Medicare Capture Rate (2022) |
|---|---|---|---|
| 50.96% | 60.41% | 69.43% | 71.61% |

This data was through July 2022.

Enterprise CAC and CDI systems work together as a single integrated platform across the inpatient hospital setting. To further improve reimbursement rates, John Muir Health recently added Optum Professional CAC for its physician offices — bringing in additional layers of compliance and replacing manual physician coding. Professional CAC operates independently yet allows for consolidated reporting, unlike John Muir Health legacy systems.

Team communication and reporting have been streamlined across the John Muir Health system. Physician office patient files that were once coded inside the EMR system are now coded within Professional CAC, allowing them to be included in John Muir Health's comprehensive revenue cycle management reporting. Optum resolved onboarding challenges by leveraging on-site monthly meetings to work through start-up issues and continue optimizing the platform.

## Optum Professional CAC
**Accurate, efficient and compliant coding improves the middle revenue cycle.**

- Increased efficiency by reducing manual processes
- Improved compliance through traceable audit trails
- Achieved more timely, accurate and consistent coding
- Built-in LCD and CDI edits and information for assessing appropriate E/M levels

## Optimized Coding Operations

- Flexible, scalable professional coding operations across the ambulatory system
- Improved coding and CDI team collaboration
- New shared ownership for query impact reduced team friction
- Reporting capabilities provided reliable and accurate metrics

## Optum Enterprise Computer Assisted Coding and CDI 3D

- Timely and accurate reimbursement
- Revenue integrity
- Cost containment

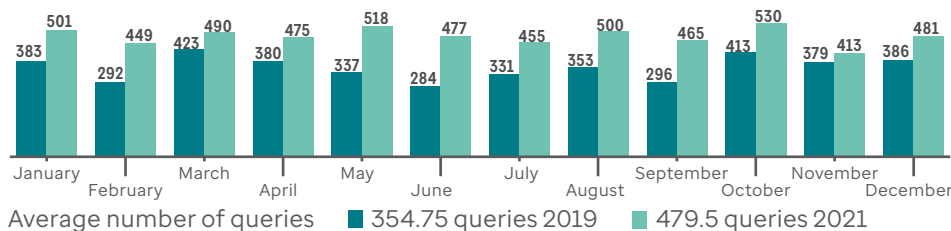## Most recent Optum Enterprise CAC and CDI 3D improvements

↑**9%**
Enterprise CAC physician agreed queries increase compared with previous CAC system

↑**22%**
Average monthly increase in CDI case review from 2019 to 2021

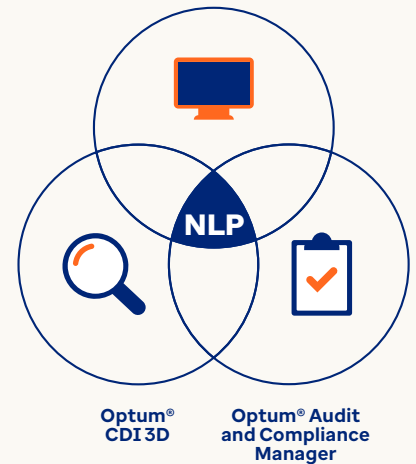### Comparison of number of queries written 2019 vs. 2021



| Month | 2019 | 2021 |
|---|---|---|
| January | 383 | 501 |
| February | 292 | 449 |
| March | 423 | 490 |
| April | 380 | 475 |
| May | 337 | 518 |
| June | 284 | 477 |
| July | 331 | 455 |
| August | 353 | 500 |
| September | 296 | 465 |
| October | 413 | 530 |
| November | 379 | 413 |
| December | 386 | 481 |

Average number of queries ■ 354.75 queries 2019 ■ 479.5 queries 2021

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## Optum® Enterprise and Professional CAC



**Optum® CDI 3D**    **Optum® Audit and Compliance Manager**

NLP

- **Complete and accurate clinical documentation**
- **Accurate coding**

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**To learn more about Optum Enterprise and Professional CAC and CDI 3D solutions and benefits visit us at:**

[optum.com/EnterpriseCAC](optum.com/EnterpriseCAC)

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