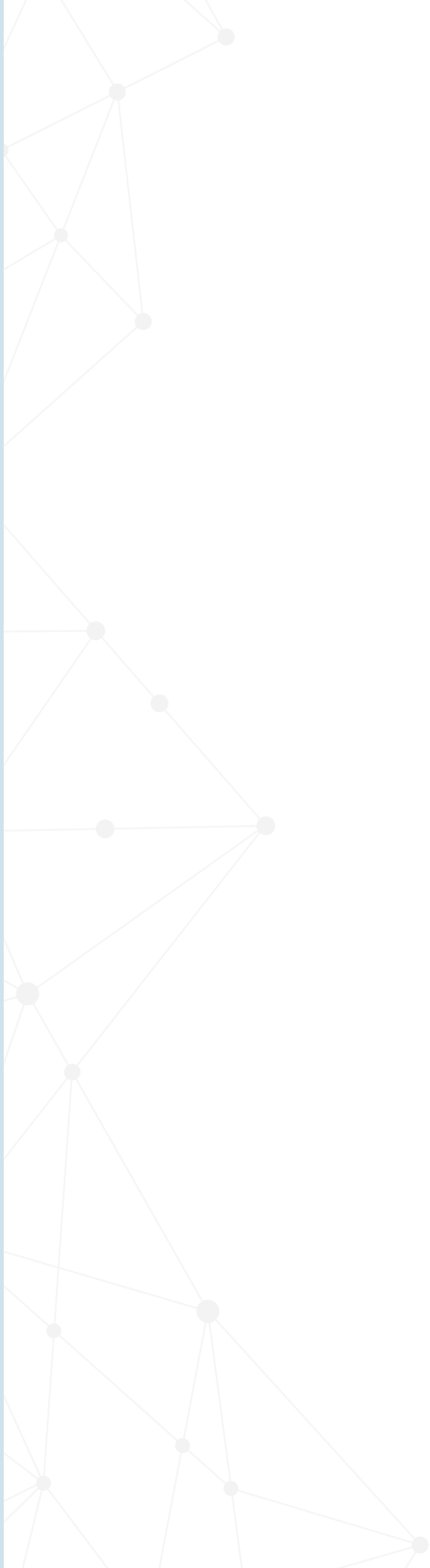


2024 CAQH Index[®] Report

From Transactions to Trust: Building Better Care Through Healthcare Automation

The CAQH Index is the industry source for tracking health plan and provider adoption of electronic administrative transactions and the opportunity for future savings.





Introduction

For over a decade, the CAQH Index has been the trusted source for tracking provider and health plan adoption of fully electronic administrative transactions, highlighting progress made and identifying opportunities for future savings.

Since 2011, CAQH has published this annual report, which has expanded in scope over the years to include more transactions, increased participation, and additional metrics. The CAQH Index is widely cited by industry leaders, federal agencies, and researchers, serving as a critical resource for regulatory development and guiding providers and health plans as they allocate resources and set priorities.

The 2024 CAQH Index introduces new features, including Patient Impact insights and provider quotes, which bring the data to life by illustrating the real-world implications of healthcare transactions. This year's report reflects the collaborative efforts of over 600 provider organizations across the medical and dental industries, and health plans covering 63 percent of insured lives. We extend our gratitude to these organizations for their invaluable participation, as well as to associations including America's Health Insurance Plans (AHIP), the American Dental Association (ADA), the American Hospital Association (AHA), the American Medical Association (AMA), the National Automated Clearing House Association (NACHA), the National Dental EDI Council (NDEDIC), and the Workgroup for Electronic Data Interchange (WEDI) for encouraging their members to contribute data. Their collective efforts, along with the CAQH Index Council, help expand the Index's impact and strengthen its value to the healthcare industry.

As we continue to examine the findings, our shared goal remains clear: to convene industry stakeholders to make healthcare work better. Thank you to the many contributors who made this year's report possible and to those who rely on its insights to drive meaningful change.



Erin Weber

Chief Policy and Research Officer
CAQH

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Executive Summary



Overview

Every day, patients, providers, and health plans navigate a complex system of administrative tasks to ensure care is delivered. These tasks, like verifying insurance, getting approvals for treatments, submitting claims, and processing payments, are essential to making healthcare work.

In the United States, administrative work such as this costs \$440 billion annually.¹ The CAQH Index focuses on a key portion of these tasks, tracking \$90 billion of the annual spending tied to both manual and automated administrative workflows in the medical and dental industries.¹

The 2024 CAQH Index identified a \$20 billion opportunity to simplify healthcare by shifting from manual processes to automated ones. This means 22 percent of the current costs could be saved, freeing up time and resources for providers to focus on patient care, rather than paperwork.

Patients benefit, too. With fewer delays caused by administrative inefficiencies, individuals can receive care faster and with fewer barriers. Automation reduces burden on providers and their staff, allowing them to spend more time with patients instead of managing time-consuming manual processes.

Despite challenges in 2023 — such as workforce shortages, rising costs, the end of the COVID-19 Public Health Emergency, and increasing cyber threats^{2,3,4,5} — automation helped healthcare organizations avoid \$222 billion in administrative costs. This is a 15 percent increase in savings compared to the previous year, demonstrating the growing potential of automated solutions to improve healthcare delivery for everyone involved.^{6,7,8}

The CAQH Index, now in its 12th year, measures progress in reducing administrative costs and improving workflows. By tracking how electronic transactions are used and where opportunities for improvement remain, the CAQH Index highlights a path forward to a more efficient, patient-centered healthcare system.

¹ Manual workflows consist of those completed using phone, fax, email and mail. Automated workflows are those completed electronically in real-time.

Key Terms and Financial Metrics

Below are the primary metrics reported for each transaction in the 2024 CAQH Index report.

Key Terms

Adoption

Adoption rates are calculated using only medical and dental plan reported volumes.

Estimated Volume

The number of fully electronic, partially electronic, and manual administrative transactions reported by medical and dental plans and providers weighted to a national level.

Fully Electronic

Administrative transactions conducted using a HIPAA-mandated standard, unless otherwise specified.

Partially Electronic

Administrative transactions conducted using web portals and interactive voice response (IVR) systems.

Fully Manual (Manual)

Administrative transactions requiring end-to-end human interaction such as telephone, mail, fax and email.

Financial Metrics

Cost Per Transaction

The labor costs (e.g., salaries, wages, personnel benefits and related overhead) associated with full electronic, partially electronic, and fully manual transactions. Costs include the labor time required to conduct the administrative transaction, not the time and cost associated with gathering information for the transaction and follow-up. Costs do not include system costs (e.g., maintaining, building or buying software or other equipment).

Administrative Spend (Estimated Spend)

The amount that medical and dental plans and providers spend conducting an administrative transaction in total and by modality.

Cost Avoided

The amount that medical and dental plans and providers have saved by not conducting administrative transactions using partially electronic or manual modes.

Cost Savings Opportunity

The administrative cost savings that could be achieved by switching the remaining partially electronic and manual transactions to fully electronic transactions.

Time Savings Opportunity

The time that providers could save by switching partially electronic and manual transactions to fully electronic transactions.

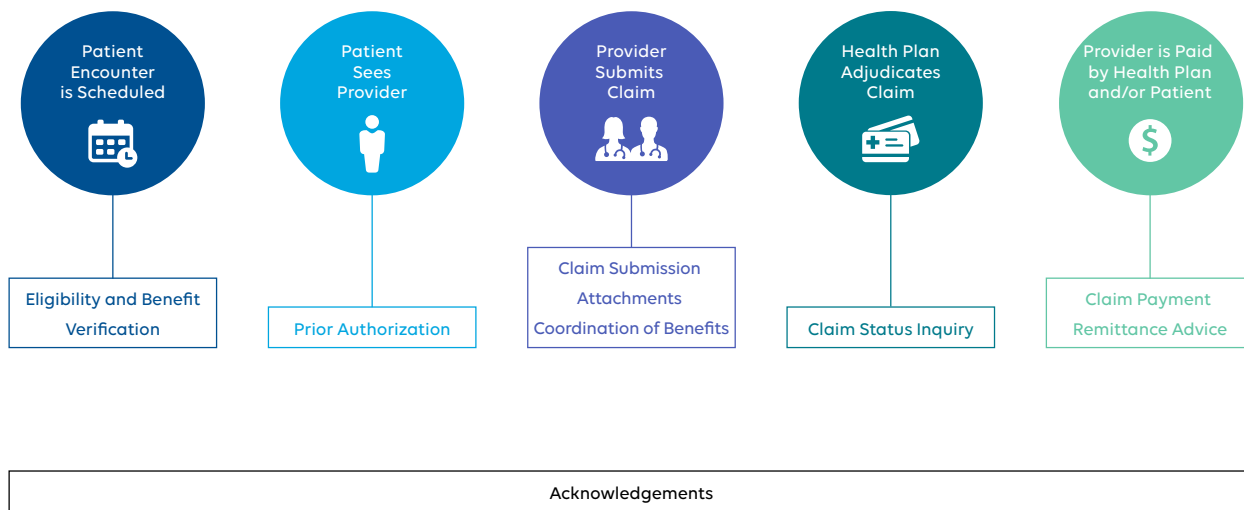
The Administrative Workflow

When patients visit a healthcare provider, their journey involves a series of administrative tasks that start with scheduling the appointment and end with payment for the care they receive. These tasks are essential to ensuring care is delivered, but they can also be time-consuming and costly.

The CAQH Index collects detailed information from both providers and health plans on how these administrative tasks are completed. It tracks the methods used — whether fully electronic, partially electronic, or manually — along with the number of transactions processed (volume) and the cost and time required to complete.

By analyzing this data, the CAQH Index highlights inefficiencies in the administrative workflow and identifies opportunities to reduce the time and cost involved. These improvements not only benefit providers by freeing up resources but also ensure patients experience fewer delays in accessing care.

The Administrative Workflow



Note: This diagram illustrates the administrative workflow in its simplest form. In practice, some transactions may occur multiple times or in multiple steps and be triggered by other events.

Key Findings

As healthcare grappled with workforce shortages in 2023 — a lingering effect of the pandemic — organizations continued to face rising costs to attract and retain essential staff.^{9,10}

This challenge coincided with the end of the COVID-19 Public Health Emergency (PHE),¹¹ as well as heightened cyber threats, increased focus on data security, and demand for Artificial Intelligence (AI) to help streamline workflows. The pandemic had already set a rapid shift in motion toward automated data exchanges between providers and health plans, and in 2023, that shift continued to transform administrative workflows, helping healthcare organizations adapt and find efficiencies amidst ongoing challenges.

“We have been impacted by staffing shortages for sure, and that has impacted our front desk and clerical support ... It’s harder to fill vacancies, especially for administrative positions, but on top of that, our higher-level administration has instituted more of a review process for new hires, because of budgetary issues.”

– Medical Practice

[Staffing is an issue for] dental hygienists especially when [there are] big shortages, regionwide, statewide, nationwide, big shortages.”

– Dental Practice

In the medical industry, despite rising staffing costs, overall spending on administrative tasks held steady thanks to increased automation, which lowered transaction costs. In contrast, administrative costs in the dental industry rose as task volume and expenses grew. With healthcare utilization on the rise, administrative tasks increased, adding pressure to ongoing staffing challenges.^{12,13} In response, organizations prioritized operational efficiencies.¹⁴ Electronic workflows were adopted to cut down on costly manual tasks for providers and staff.

However, some providers and staff preferred manual processes due to implementation costs and familiarity with current methods.

At the same time, many organizations explored AI and large language models to reduce administrative burden and staff fatigue. Cybersecurity was a priority, with a record 725 major healthcare breaches reported in 2023.¹⁵ Organizations invested in technology to counter cyber threats and protect electronic systems from attacks. They focused on safeguarding data, infrastructure, and reducing staff burnout. Automation and AI emerged as key tools to lighten manual workloads, enabling providers and staff to deliver quality care more efficiently.¹⁶

Automation helped the industry avoid spending \$222 billion on administrative tasks measured in the CAQH Index — a 15 percent increase from the previous year. Reducing manual tasks not only lowered costs and saved time but has the potential to boost staff satisfaction and ultimately patient care.^{17,18} Organizations should continue promoting and investing in automated workflows through initiatives, trainings, and communications while staying vigilant against cyber threats. As health plans and practices work to maximize resources, technologies like AI are increasingly seen as valuable solutions.¹⁹ The industry should continue to examine AI’s impact on administrative tasks, with a focus on boosting efficiency, saving time, and costs. These goals benefit health plans, providers, staff, and, ultimately, patients and their families.



Patient Impact:

As automation helps control administrative costs, patients may experience more efficient billing and fewer delays in care. By focusing on electronic workflows, healthcare providers aim to reduce time-consuming, manual tasks, allowing staff to spend more time caring for patients rather than handling paperwork.

Adoption

Electronic adoption improved or remained stable for all **medical** transactions except claim payment and coordination of benefits, and improved or remained stable for all **dental** transactions. Both industries continued to make progress towards a more automated administrative workflow.

+2
percentage
points

The average increase in adoption across both industries — the same as the previous year.

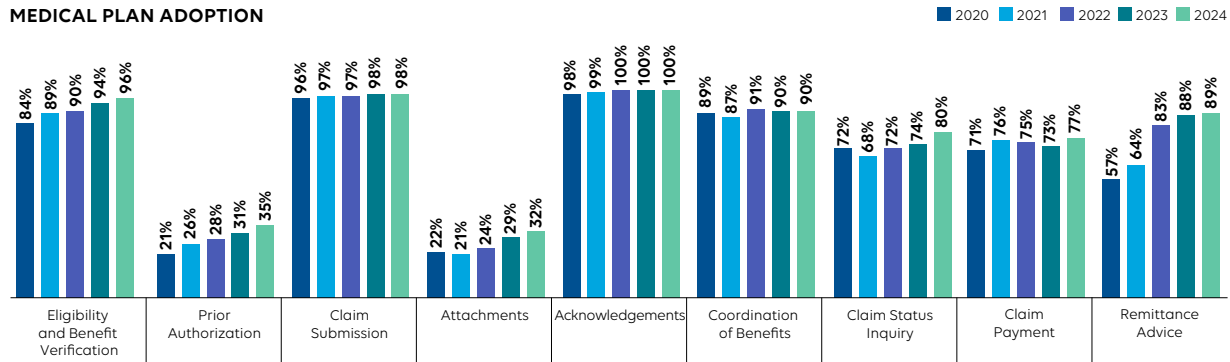


Patient Impact:

Greater automation can lead to faster service at every step of the encounter, from scheduling to billing.

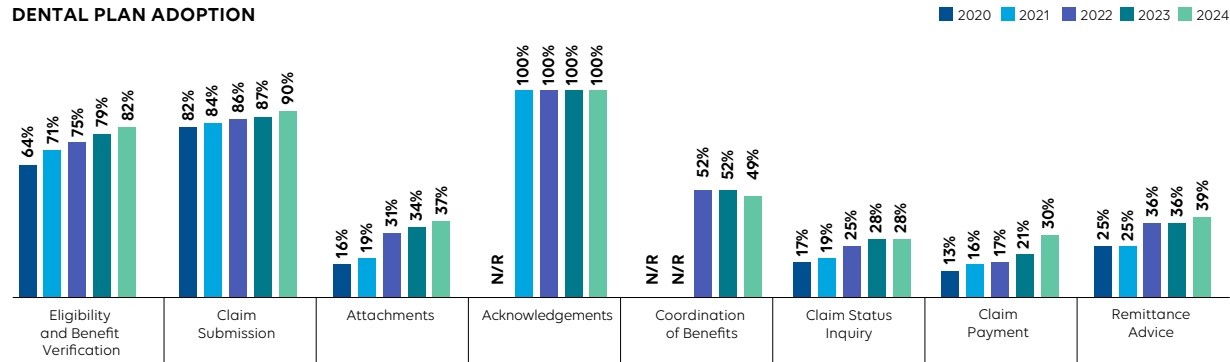
Medical Plan Adoption of Fully Electronic Administrative Transactions 2020-2024 CAQH Index

MEDICAL PLAN ADOPTION



Dental Plan Adoption of Fully Electronic Administrative Transactions 2020-2024 CAQH Index

DENTAL PLAN ADOPTION



N/R = Not Reported

Volume

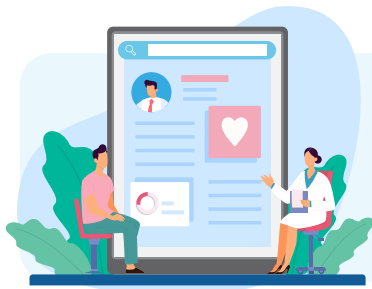
The number of administrative transactions conducted steadily **increased** for **both** industries. Electronic volume increased the most for the **medical** (15 percent) and **dental** industries (33 percent). Many health plans reported increased memberships from the previous year which resulted in more services provided.

+13%

overall **increase** in **medical** transaction volume.

+20%

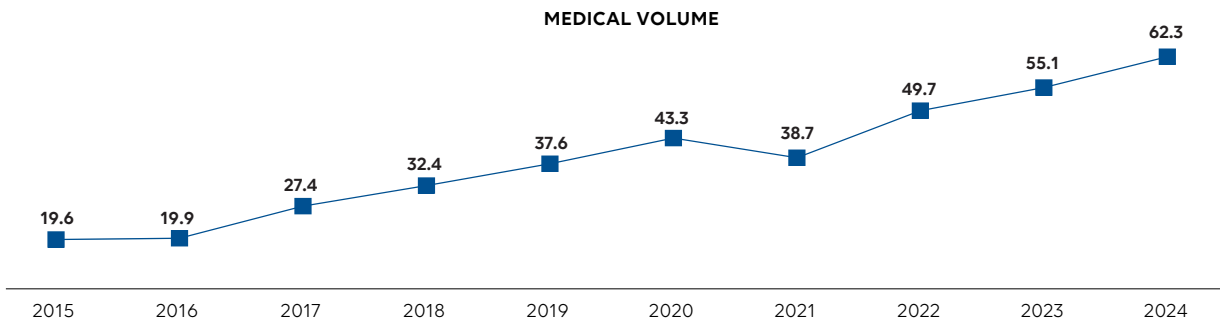
overall **increase** in **dental** transaction volume.



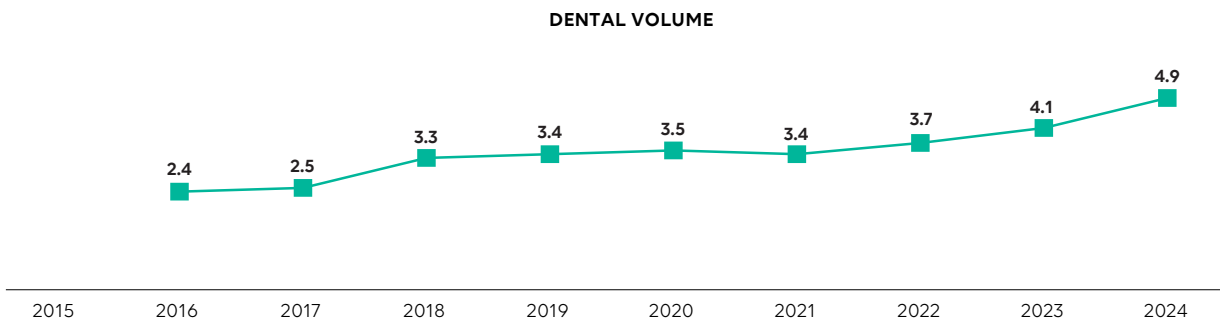
Patient Impact:

As demand for healthcare grows, streamlined processes help improve access to care.

Medical and Dental Industry Estimated National Volume 2015-2024 CAQH Index (in billions)



May not be drawn to scale.



May not be drawn to scale.

Administrative Spend

Following a sharp rise the previous year, **medical** spending on administrative processes **stabilized** in 2023. Increased utilization and manual costs from staffing challenges were offset by lower electronic costs and expanded automation.

Dental spend **increased** as providers and staff handled a higher volume of both manual and electronic tasks that cost more to complete.ⁱ

<1% to
\$83B

Medical spending
remained flat.

*Largest increase in spend:
Claim Payment (13%).*

+10% to
\$6.9B

Dental spending
increased.

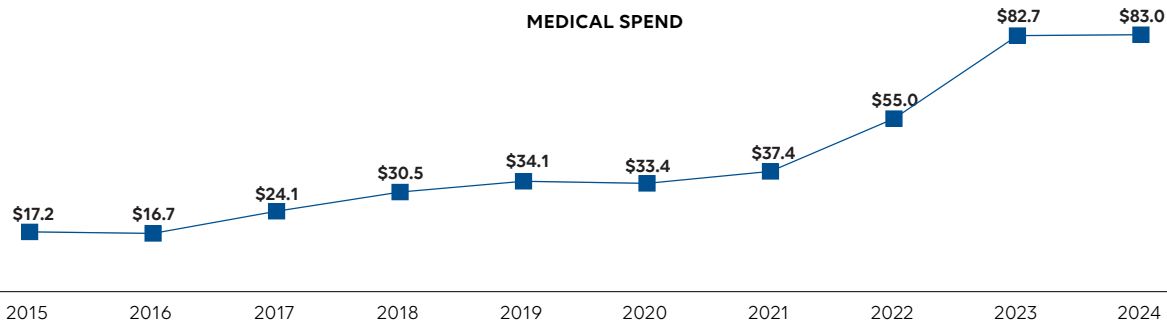
*Largest increase in spend:
Eligibility and Benefit
Verification (15%).*



Patient Impact:

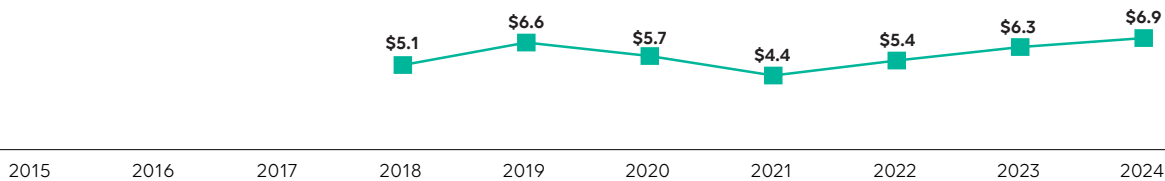
Stable spending helps healthcare providers manage costs without passing on additional expenses to patients.

**Medical and Dental Industry Estimated National Spend
2015-2024 CAQH Index (in billions)**



May not be drawn to scale.

DENTAL SPEND



May not be drawn to scale.

ⁱ Reported salaries for dental providers and staff increased approximately six percent, on average, from the previous year compared to three percent for medical.

Cost Savings Opportunities

Cost-saving opportunities **increased** for **both** industries. For the medical industry, the cost **gap** widened as manual tasks became more expensive for providers and staff, while electronic tasks became less expensive.¹

In the **dental** industry, fewer manual transactions helped balance rising manual costs, while growth in electronic transaction volume and costs created a greater cost-saving opportunity.

+12% to **\$18.4B**

Medical industry cost savings opportunity **increased**.

+11% to **\$2.1B**

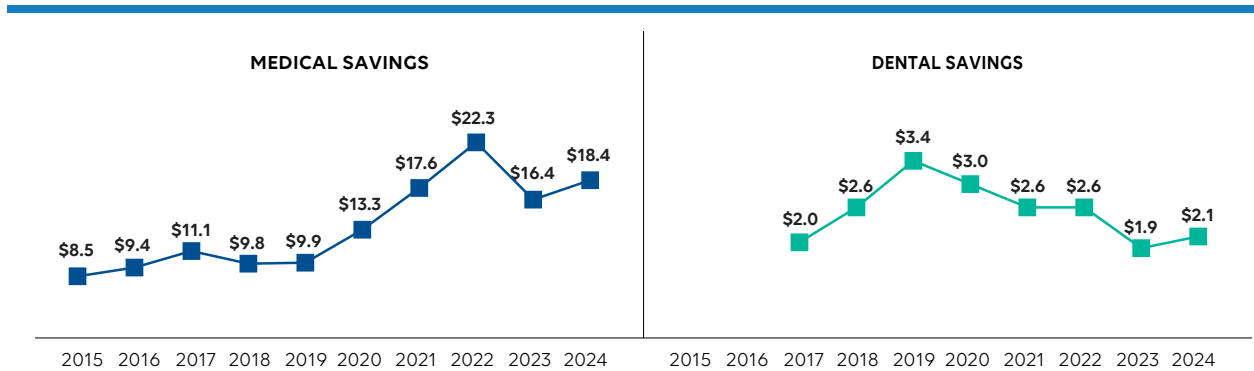
Dental industry cost savings opportunity **increased**.



Patient Impact:

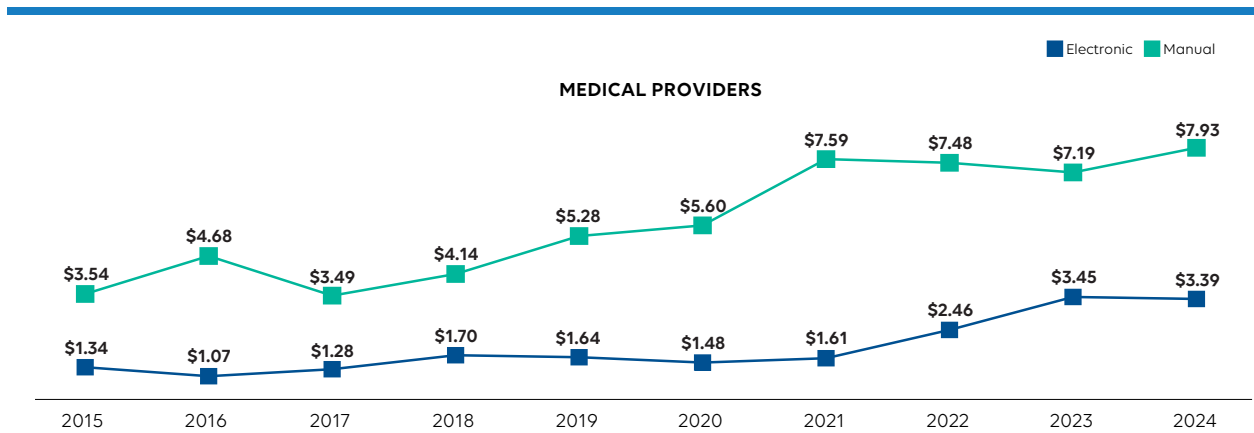
Administrative costs savings for providers could lead to an opportunity to pass savings on to patients.

Medical and Dental Industry Estimated National Cost Savings Opportunity 2015-2024 CAQH Index (in billions)



May not be drawn to scale.

Medical Provider Average Cost per Transaction for Electronic and Manual Transactions 2015-2024 CAQH Index



¹ Cost saving opportunity refers to the cost that could be achieved by moving the remaining manual and partial transaction to electronic ones. The gap refers to the difference between the average manual and electronic unit cost to conduct the transactions.

Industry Call to Action: Turning Insights into Action

The 2024 CAQH Index paints a clear picture of where the healthcare industry stands today — and where it can go tomorrow. Despite the challenges of staffing shortages, rising costs, and increasing cybersecurity threats, the industry has made steady strides in automating workflows and embracing technology to improve efficiency and reduce costs. These achievements underscore the opportunity and urgency to act boldly, ensuring every patient benefits from a more streamlined, cost-effective healthcare system.

This is the moment to leverage the insights gained from the 2024 CAQH Index and drive meaningful transformation. By working together, healthcare leaders can maximize the potential of automation and innovation to strengthen administrative processes and enhance care delivery. The steps we take now will shape the future of healthcare for patients, providers, and plans alike.

What the Industry Can Do Now:

- **Prioritize Patient-Centered Outcomes:** Every administrative improvement must ultimately serve the patient. By reducing manual errors, lowering costs, and enhancing transparency, the industry can deliver a seamless experience that improves access and satisfaction.
- **Expand Automated Workflows:** The medical and dental industries collectively have a \$20 billion opportunity to reduce costs by moving from manual to automated workflows. Prioritizing investments in electronic processes that simplify routine tasks will allow staff time to focus on patient care.
- **Foster Collaboration:** Administrative challenges require collective solutions. CAQH convenes providers, health plans, and others through forums like the CAQH CORE community, the authoring entity for national Operating Rules. By exchanging ideas and co-creating standards, stakeholders drive progress, reduce inefficiencies, and build a healthcare system that works better for everyone.
- **Explore AI and Emerging Technologies:** Artificial intelligence and large language models offer new avenues for streamlining administrative workflows. Healthcare organizations must continue to explore and implement these tools thoughtfully, balancing their potential benefits with real-world limitations.
- **Advance Relevant Standards:** Continued collaboration on the development and maintenance of standards and operating rules is critical as technology evolves. For example, with new Centers for Medicare and Medicaid Services (CMS) requirements for HL7 FHIR-based APIs by 2027, the industry has an opportunity to simplify the complex prior authorization process. Modernizing standards is expected to drive efficiency, reduce administrative burden, and improve the overall healthcare experience.
- **Commit to Cybersecurity:** Protecting patient data and infrastructure is non-negotiable. The February 2024 Change Healthcare breachⁱ highlighted how cyberattacks can disrupt automated exchanges of information, forcing reliance on costly manual workarounds. An upcoming CAQH issue brief will explore how organizations responded to the breach, and which transactions were most impacted, offering valuable strategies to help organizations prepare for future threats. Investing in robust, scalable cybersecurity measures is essential to safeguard digital systems and prevent similar disruptions to efficiency and patient care.

ⁱ Given the 2024 CAQH Index transaction volume, time and cost data represent calendar year 2023, the estimates in this report are not impacted by the Change Healthcare breach.

By focusing on automation, collaboration, and patient-centered outcomes, we can address the inefficiencies that drive up costs and slow down care. Every dollar saved through streamlined workflows, every best practice shared, and every adopted standard brings us closer to a healthcare system where administrative processes empower, rather than hinder, providers and patients. Now is the time to act — with purpose and clarity — to reduce administrative burdens, protect critical data, and ensure that healthcare resources are used where they matter most: delivering better care for all.



A network diagram consisting of several nodes (small circles) connected by thin lines, forming a web-like structure. The nodes are distributed across the top and bottom of the page, with some lines extending towards the center. The background is a solid blue color.

Detailed Administrative Workflow

Eligibility and Benefit Verification

Definition:

An inquiry from a provider to a health plan or from one health plan to another to obtain eligibility, coverage, or benefits associated with the plan and a response from the health plan to the provider. Does not include referrals. HIPAA Transaction Standard: ASC X12N 270/271.

Transaction Highlights

1 Adoption Increased — Among the Highest

Before a medical appointment, healthcare providers or staff typically verify a patient's insurance coverage and benefits along with information about co-payments and deductibles. This information may be used to inform patient-provider conversations about treatment options. While these verification checks are typically done automatically, some are conducted via phone, fax, email, or a plan portal.

In 2023, health plan adoption of electronic eligibility and benefit verifications continued to grow, with adoption increasing two percentage points for the medical industry and three for the dental industry. A large national health plan indicated that, as part of their ongoing effort to reduce call volumes, their digital team actively engages with provider groups to promote electronic adoption, which has led to increases in automation. The health plan stated that they will continue to add enhancements to improve the provider experience and adoption.

Understanding that dental care can require unique eligibility information, the American Dental Association (ADA) and National Dental EDI Council (NDEDIC) remain engaged in improving the value of the 270/271 workflow to the industry. These groups, along with CAQH CORE, have collaborated to ensure dental-specific information is included and accurately represented in the eligibility and benefit transaction at a procedure level to encourage adoption, buy-in, and reduce burden associated with this task.²⁰ Without this dental-specific information, feedback from dental providers indicates that they often do not receive robust enough information leading them not to trust the accuracy of automated response.

“When it comes to eligibility and benefits, I don't have an automated tool that I can trust, so I don't use it.”

– Dental Practice

2 Volume Increased — Highest for Medical and Dental

Among the administrative tasks completed along the revenue cycle workflow, eligibility and benefit verifications are conducted the most, representing 51 percent of the total medical volume and 24 percent of the total dental volume. Medical plans and providers conducted 31.5 billion verifications in 2023, up five percent, while the dental industry conducted 1.2 billion, up 24 percent. Additionally, the dental industry experienced a 32 percent increase in electronic volume due to promotion of the electronic standard and a new clearinghouse connection with a large national plan impacting numerous dental providers.


3 Spending Increased — Largest for Dental

After a large increase in spend the previous year due to an increase in time to conduct verifications, medical spending increased slightly, three percent, to \$44 billion which accounts for the largest portion of the annual spend at 53 percent.

Spending for the dental industry increased 15 percent — the highest increase among the administrative tasks measured — to \$2.1 billion which also accounted for the largest portion of total annual spend at 30 percent. This increase was driven by an increase in volume and cost to conduct an eligibility and benefit check via a portal — the highest portal cost among the dental transactions. Variations in portal requirements and formats add complexity to the task.

4 Cost Savings Opportunity Increased — Highest for Medical

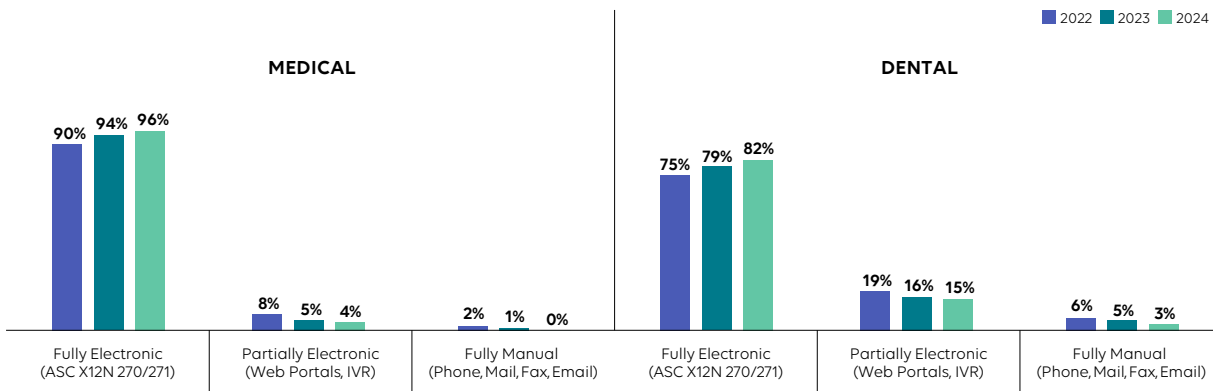
The potential cost savings from switching to electronic eligibility and benefits checks — rather than doing them manually or through a portal — grew this year for both industries after a decline last year. For the medical industry, the savings opportunity increased 27 percent to \$11.7 billion — the highest among the medical transactions — and seven percent for the dental industry to \$580 million.



Patient Impact:
Fully adopting electronic eligibility and benefits checks can give patients clarity on coverage prior to and at the time of service, reduce surprise bills, and empower them to make informed healthcare decisions.

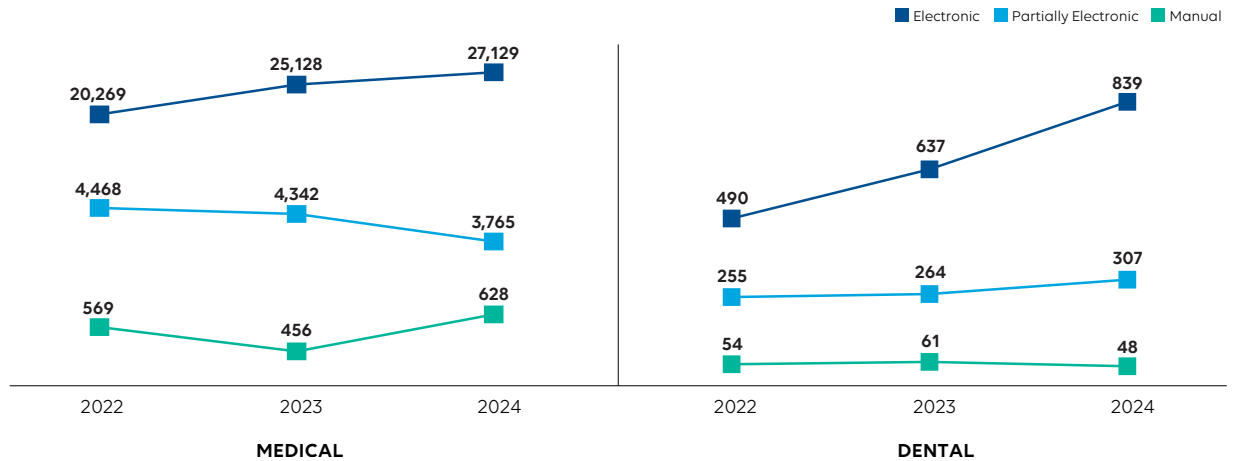
Adoption

Medical and Dental Plan Adoption of Eligibility and Benefit Verification
2022-2024 CAQH Index



Volume

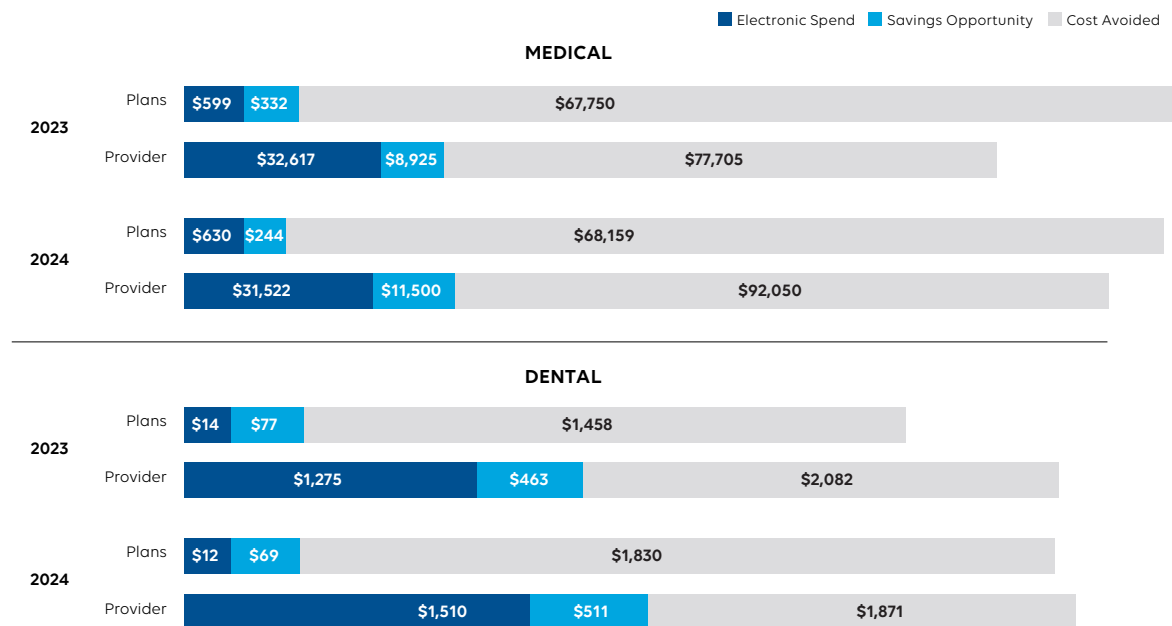
Estimated National Volume of Eligibility and Benefit Verification by Mode
2022-2024 CAQH Index (in millions)



May not be drawn to scale.

Spending & Savings

Eligibility and Benefit Verification: How Much is Spent and Saved with Full Adoption?
2023-2024 CAQH Index (in millions)



May not be drawn to scale.

Electronic Eligibility and Benefit Verification



Cost Savings Opportunity

\$12.3 Billion
Combined
Cost Savings



Medical Industry:
\$11.7 Billion



Dental Industry:
\$580 Million



Time Savings Opportunity

Average Time
Savings Opportunity
(per transaction):



Medical Providers:
12 Minutes



Dental Providers:
8 Minutes

Updates to the CAQH CORE Eligibility & Benefits (270/271) Data Content Operating Rule

The Biden Administration's Spring 2024 Unified Agenda of Regulatory and Deregulatory Actions lists interim final rulemaking (IFR) to adopt an updated set of CORE Eligibility & Benefits Operating Rules for federal mandate under HIPAA in Spring of 2025. These operating rules, recommended for federal adoption by the National Committee on Vital and Health Statistics (NCVHS) to HHS in June of 2023, advance greater industry automation, and require — among other advantages — health plans to return eligibility information related to telemedicine, prior authorization, remaining coverage benefits, tiered benefits, procedure-level detail, and patient attribution status to population health value-based contracts. Public comments will be accepted for 60 days following the release of the IFR.

Additionally, in collaboration with the American Dental Association, the National Dental EDI Council (NDEDIC), and the National Council for Prescription Drug Programs (NCPDP), CORE convened a task group in 2024 that aligns CORE Eligibility & Benefits Data Content Operating Rule requirements with business needs related to dental benefits and medications covered under the medical benefit. The updated operating rule is expected to be finalized in early 2025.

Prior Authorization

Definition:

A request from a provider to a health plan to obtain authorization for healthcare services or a response from a health plan for an authorization. Does not include referrals. HIPAA Transaction Standard: ASC X12N 278.

Transaction Highlights

Medical Adoption Increased

Under a patient's medical plan, certain procedures or treatments may require approval from the health plan to ensure that they are covered and qualify for payment. Providers request this approval or authorization from plans which may take a day or weeks to receive.²¹ Delays in care due to prior authorizations continue to impact patients and providers and the Centers for Medicare & Medicaid Services (CMS), in January 2024, released a final rule²² with a primary goal to improve prior authorization processes through policies and technology, to help ensure that patients remain at the center of their own care.^{23,24,25}

Use of electronic standards can alleviate some of the burden and frustration associated with prior authorizations by streamlining the process and providing transparency for plans and providers. While it is encouraging to see adoption of electronic prior authorizations steadily grow, increasing four percentage points, the new requirements for FHIR may further accelerate progress.

The Interoperability and Prior Authorization Final Rule (CMS 0057) was promulgated by CMS in January 2024. Among its broad requirements, CMS 0057 mandates adoption of HL7 FHIR-based APIs to submit and exchange prior authorization requests between providers and health plans. CMS has since exercised enforcement discretion of the X12 278 transaction for HIPAA-covered entities that conduct prior authorization workflows electronically using HL7 FHIR. Entities impacted by CMS 0057 must meet HL7 FHIR-based API requirements by January 2027. It is anticipated that use of the X12 278 will decrease as industry approaches regulatory deadlines.

Medical Volume Decreased

After increasing last year, overall volume decreased by three percent, driven by a 37 percent drop in manual volume countered by an increase in portal (20 percent) and electronic (six percent) volume. One large national plan stated that the reduction in their phone calls may be related to a reduction in the scenarios that require prior authorization. In 2023 the plan removed nearly 25 percent of medical services from prior authorization (or precertification) requirements with the goal of simplifying the healthcare experience for both customers and providers.

As in previous years, providers continue to request a prior authorization from a health plan most often via a portal.

3 Medical Spend Decreased

Despite the increase in cost to conduct a prior authorization using phone, mail, fax, or email — one of the highest per transaction manual costs among providers — the decrease in the number of prior authorizations conducted in this manner led to an overall four percent decrease in spend associated with this task.

Similar to the previous year, data indicated that specialists and behavioralists spent more time and therefore more money conducting prior authorizations than generalists due to the more complex nature of their services.^{iv}

4 Provider Time to Conduct Prior Authorizations — Among the Highest

For providers and staff, conducting a prior authorization remains one of the most time consuming, burdensome administrative tasks.²⁶ On average, providers and staff reported spending 24 minutes requesting an authorization from a health plan using phone, fax, or an email and 16 minutes using a health plan portal — the highest time spent conducting an administrative transaction using a portal. Complex and changing plan requirements, inconsistent data, and low adoption rates increase the time, cost, and frustration involved in completing prior authorizations.

“We request prior authorization on the website ... sometimes if it is not done in time and it's a situation where we need to obtain prior authorization in a hurry, then we get on the phone and try to obtain it before the patient leaves the office.”
 – Medical Practice

“If we do not find the complete information in the web portal, we call the insurance company, and that is time-consuming.”
 – Medical Practice



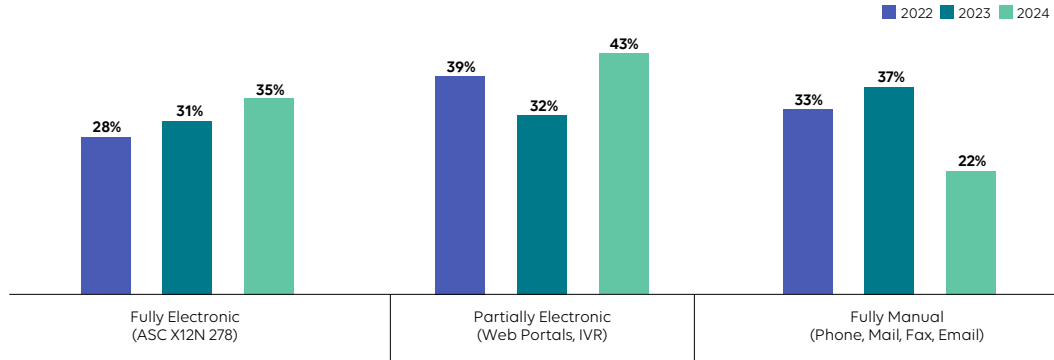
Patient Impact:

With more automated prior authorization processes, patients face fewer delays and a simpler healthcare experience, making it easier to access needed care.

^{iv} An issue brief exploring opportunities to reduce burden by specific provider type along the revenue cycle will be released in Q2 2025.

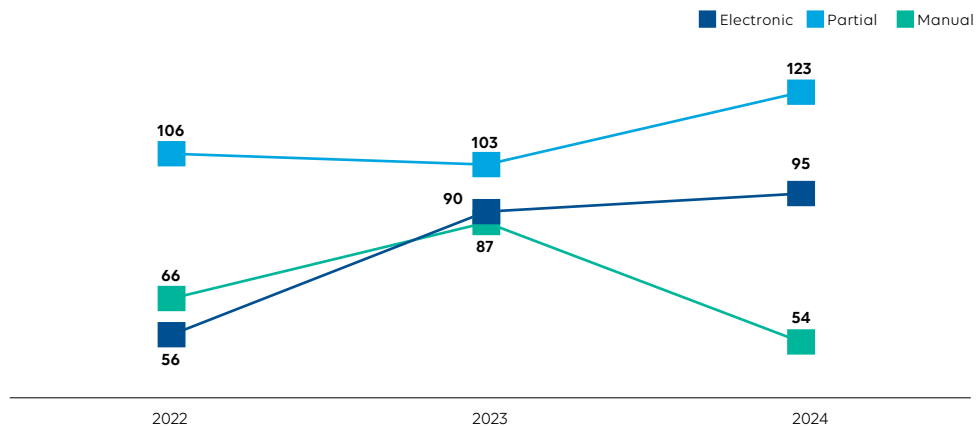
Adoption

Medical Plan Adoption of Prior Authorization 2022-2024 CAQH Index



Volume

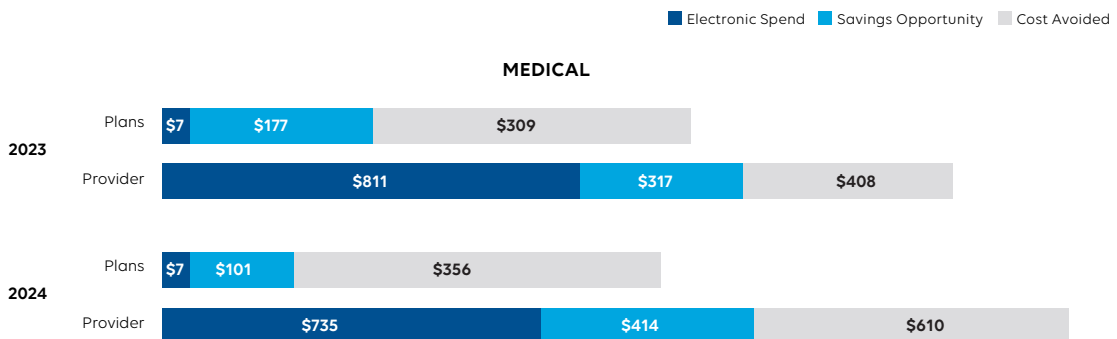
Estimated National Volume of Prior Authorization by Mode 2022-2024 CAQH Index (in millions)



May not be drawn to scale.

Spending & Savings

Prior Authorization: How Much is Spent and Saved with Full Adoption? 2023-2024 CAQH Index (in millions)



May not be drawn to scale.

Electronic Prior Authorization



Cost Savings Opportunity



Medical Industry:
\$515 Million



Time Savings Opportunity

Average Time
Savings Opportunity
(per transaction):



Medical Providers:
14 Minutes

Prior Authorization Measurement Initiative with CAQH CORE

CORE has launched a prior authorization measurement initiative to help organizations track, monitor, and measure key components of implementing prior authorization requirements in the Centers for Medicare and Medicaid Services Interoperability and Prior Authorization Rule (CMS 0057) Final Rule²⁷ published in early 2024. Measurement includes implementation impact on resources devoted to prior authorization pre- and post- implementation changes to workflow efficiency and workflow accuracy, and changes in provider staff satisfaction. By tracking implementation with CORE, organizations will be able to effectively monitor return on investment and articulate operational costs and resource savings. In addition, this cohesive and standard measurement approach strengthens identification of improvement areas and can influence potential future policy refinements.

Implementers have until January 1, 2026 to integrate changes, such as decision timeframes and reasons for denial, into their workflows. They have until January 1, 2027 to deploy HL7 FHIR-based Prior Authorization APIs. CORE is acting now to support providers and health plans in capturing their current state to enable ROI measurement related to CMS 0057 implementation. Email core@caqh.org if your organization is interested in participating.

Claim Submission

Definition:

A request to obtain payment or transmission of encounter information for the purpose of reporting delivery of healthcare services. HIPAA Transaction Standard: ASC X12N 837.

Transaction Highlights

1 Medical Adoption Stable — Approaching Full Automation, Dental Increased

After a patient's appointment, providers or their staff send a claim to the health plan with details about the diagnosis and treatment cost to get paid for the services. For both industries, this is one of the most automated administrative tasks. The medical industry has almost achieved full electronic adoption at 98 percent while dental electronic adoption increased three percentage points to 90 percent.

"[Reasons for using electronic submissions] One, it's more efficient. It saves time. Two, it assists with quality assurance review. When we do it electronically it's easier to see what's denied and figure out why."

– Medical Practice

2 Volume Increased

Overall medical volume increased slightly, one percent, while overall dental volume increased 10 percent. The medical and dental industries experienced an increase in the use of electronic claim submission (one and 16 percent, respectively) and a decrease in manual submissions (six and 14 percent, respectively). One large dental plan reported that the increase in claim submissions can be attributed to increased enrollment; the plan onboarded new partnerships and members in 2023.

"When it comes to claims submissions, [using electronic submissions] is actually really, really good, and it saves a lot of time, so I use it as much as I can. I only go manual if I absolutely have to."

– Dental Practice

3 Spending Increased

The spend associated with submitting a claim, while increasing substantially the previous year for the medical and dental industries due to rising provider costs, rose at a smaller rate in 2023 increasing one and 13 percent, respectively. Despite the smaller increases, spending on this administrative task accounts for 23 percent of the total annual medical spend and 21 percent of the total annual dental spend — the second highest amount for both industries.

Medical and dental practices continue to devote resources to submitting accurate claims as denial rates remain an issue — 12 percent of claims were denied in 2023.²⁸ Many providers have expressed concern over the growing number of denials, as some plans have begun relying more on artificial intelligence (AI) to review submitted claims, which may result in delayed payments and multiple submissions to resolve as models and algorithms continue to become more refined.²⁹ The industry must balance this with the efficiencies brought forth by use of AI.

“There’s been an increase in denials, especially for more elective procedures. We put pressure on the patients to do a more thorough job preoperatively. It’s taking a lot more time to get paid, and it’s painful. It’s a lot more expensive — I’m charging more, and we’re turning down more people. I worry it’s affecting care quality.”

– Medical Practice

4 Medical Cost Savings Opportunity Increased, Dental Decreased — Largest Drop

As the cost for providers and staff to submit a claim via fax and email increased, and the cost to submit automatically decreased, the cost savings opportunity associated with moving from manual to electronic submissions grew for the medical industry, 20 percent to \$2.5 billion. This is the second highest cost savings opportunity after eligibility and benefit verification and accounts for 14 percent of the annual cost savings opportunity.

The dental industry experienced a 57 percent decrease in cost savings opportunity, following an increase the previous year. This occurred as adoption grew, and manual volume and provider costs decreased after increasing the previous year.

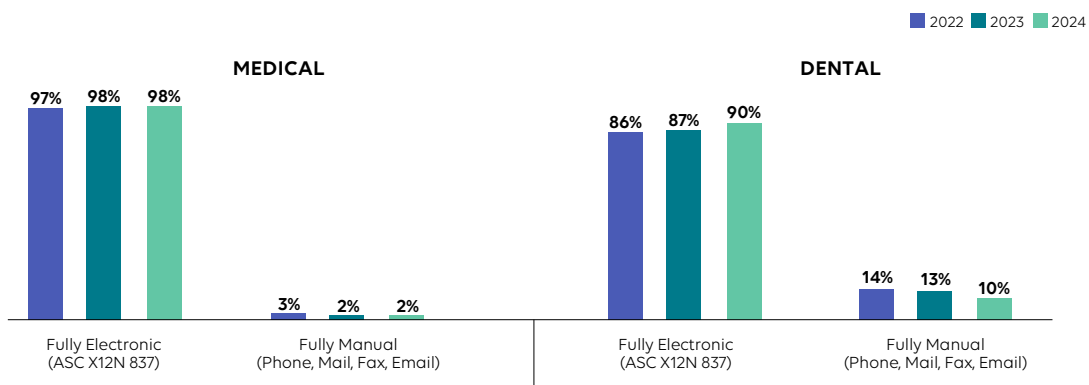


Patient Impact:

With 98 percent of medical claims submitted electronically, accurate data sharing is essential to prevent claim denials that could leave patients responsible for unexpected costs — a need that’s even more critical as health plans increasingly use AI to review claims.

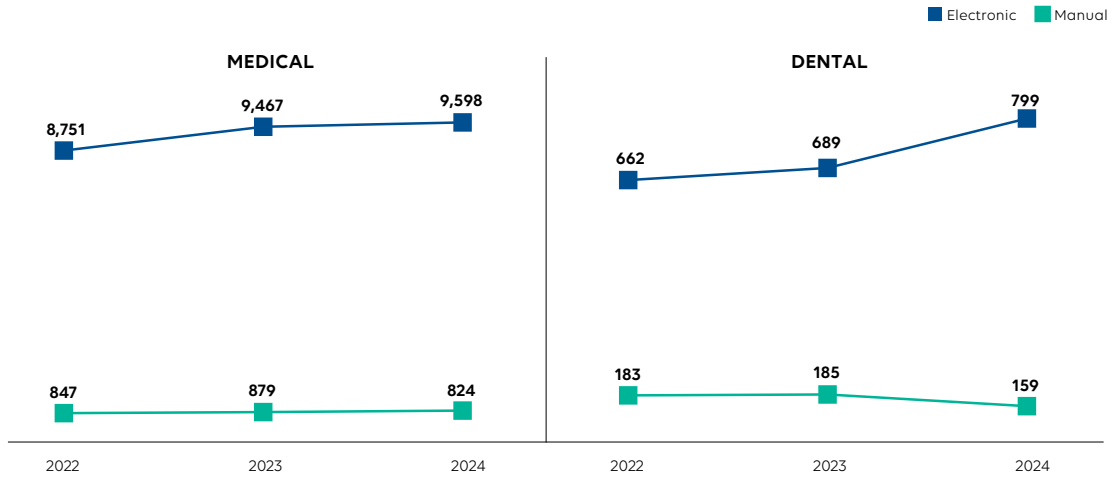
Adoption

Medical and Dental Plan Adoption of Claim Submission
2022-2024 CAQH Index



Volume

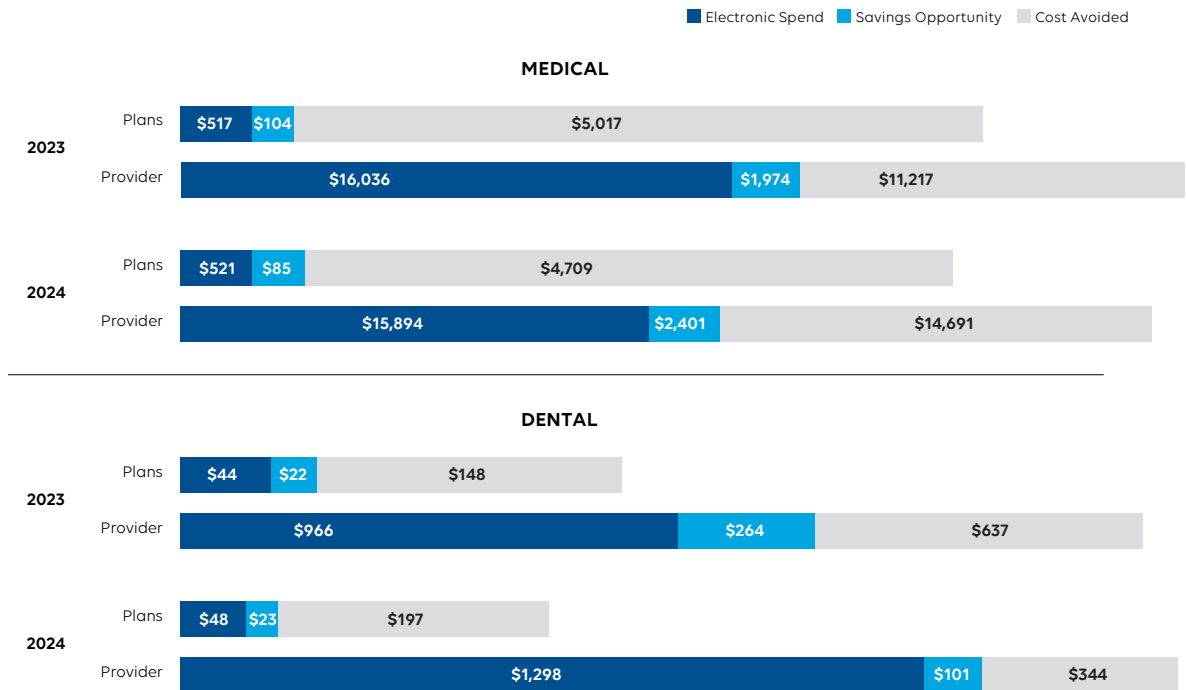
Estimated National Volume of Claim Submission by Mode
2022-2024 CAQH Index (in millions)



May not be drawn to scale.

Spending & Savings

Claim Submission: How Much is Spent and Saved with Full Adoption?
2023-2024 CAQH Index (in millions)



May not be drawn to scale.

Electronic Claim Submission



Cost Savings Opportunity

\$2.6 Billion
Combined
Cost Savings



Medical Industry:
\$2.5 Billion



Dental Industry:
\$124 Million



Time Savings Opportunity

Average Time
Savings Opportunity
(per transaction):



Medical Providers:
7 Minutes



Dental Providers:
2 Minutes

New CORE Health Care Claims (837, 277CA) Operating Rules

Early in 2024, CAQH CORE published new CORE Health Care Claims Data Content Operating Rules for both the 837 claim submission and 277CA claim acknowledgement transactions to address business needs related to health care claim submissions, including inconsistent data sharing between providers and payers, and notable increases in claim denials. The rules standardize claim submission data content, establish a CORE-required Code Set for Error Reporting, and specify required data to support and streamline coordination of benefit (COB) workflows, among other benefits. These rules are currently available for industry adoption.

In November of 2024, the CORE Board submitted a letter to the National Committee on Vital and Health Statistics (NCVHS) requesting consideration of a set of operating rules for federal adoption including the new health care claims rules. Seventy-five organizations — including health plans representing 78 percent of covered lives, provider organizations and associations representing over 270,000 providers, and leading technology vendors — actively contributed to the development of these operating rules, underscoring their potential to bring lasting improvements in healthcare transaction efficiency.

Attachments

Definition:

Additional information submitted with claims for payment, claim appeals or prior authorization, such as medical records to support a claim or to explain the need for a procedure or service. Transaction Standards: ASC X12N 275, HL7 CDA.

Transaction Highlights

Adoption Increased — Lowest for Medical

When providers submit a claim, they often need to include additional documents like lab results, imaging scans or discharge notes to explain clinical decisions for a prior authorization, appeal or payment requests. These attachments are sent in various ways — fax, mail or email — and in different formats because there is no federally mandated electronic standard.

Without a federal standard, electronic use for attachments remains the lowest among medical transactions, even with a small increase of three percentage points to 32 percent. Adoption also increased three percentage points for the dental industry to 37 percent. Until a mandate is named, vendors, plans, and providers are hesitant to invest in solutions to automate the exchange of attachments.

Volume Increased

After decreasing the previous year, overall medical volume increased slightly, one percent, while dental volume increased 37 percent. Both medical and dental industries experienced growth in the number of electronic attachments exchanged, 25 and 45 percent, respectively. The increase in overall volume may be due in part to some providers and staff sending “as many documents as possible” to ensure that follow-up is not needed, and claims and payments are not rejected or denied.

Medical Spending Increased

After decreasing the previous year, medical spending on attachments increased this year, six percent, due to the increase in the number of attachments submitted and provider electronic cost.

Medical Cost Savings Opportunity Decreased — Largest Decrease

The cost savings opportunity associated with moving to electronic attachments dropped substantially, 50 percent, as manual volume costs decreased and electronic volume and costs increased, narrowing the gap. This is the largest decrease among the administrative tasks.

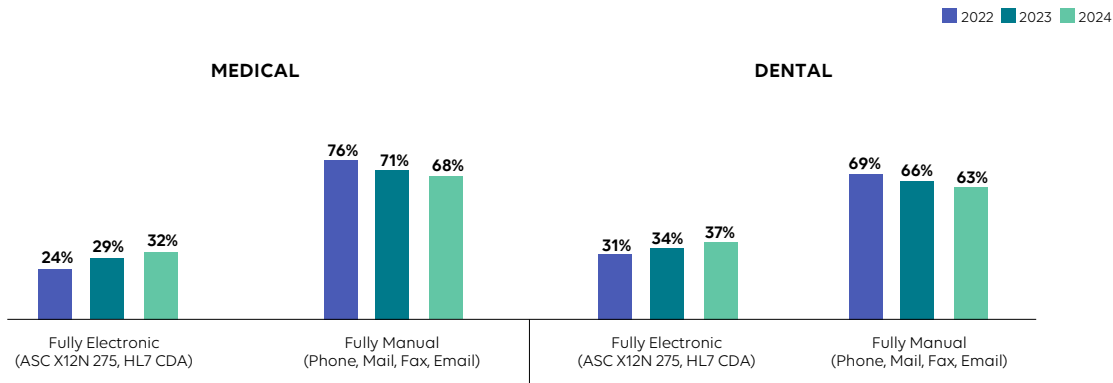


Patient Impact:

Without a federal standard for attachments, the process of exchanging important medical documents like lab results or imaging scans is slow and inefficient. This can lead to delays in approvals, payments, or appeals — ultimately delaying care and creating unnecessary stress for patients waiting for critical decisions about their health.

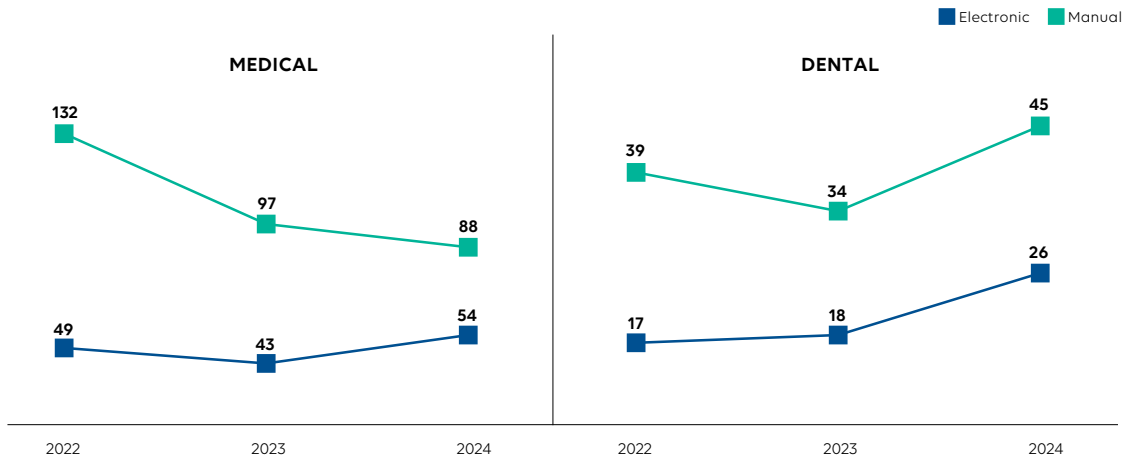
Adoption

**Medical and Dental Plan Adoption of Attachments
2022-2024 CAQH Index**



Volume

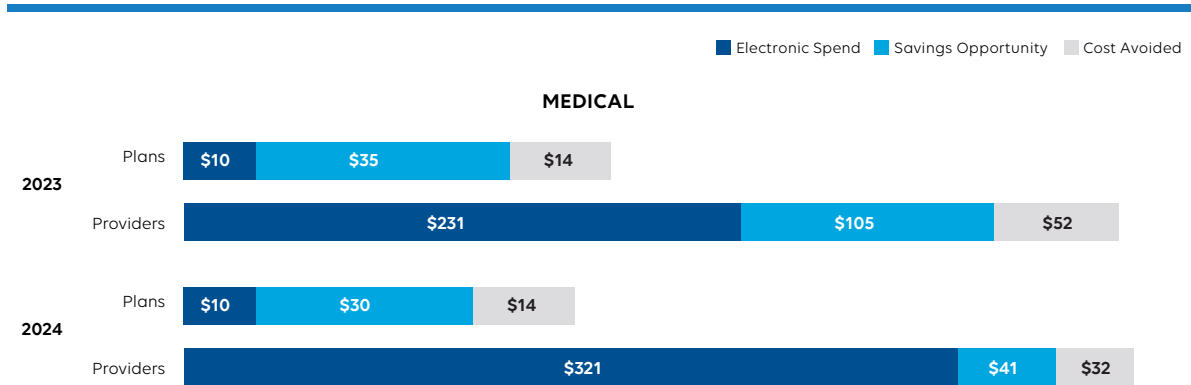
**Estimated National Volume of Attachments by Mode
2022-2024 CAQH Index (in millions)**



May not be drawn to scale.

Spending & Savings

Attachments: How Much is Spent and Saved with Full Adoption? 2023-2024 CAQH Index (in millions)



May not be drawn to scale.

Electronic Attachments



Cost Savings Opportunity



Medical Industry:
\$71 Million



Time Savings Opportunity

Average Time Savings Opportunity
(per transaction):



Medical Providers:
4 Minutes

Acknowledgements

Definition:

A health plan's response to a provider or provider's clearinghouse that they received information from the provider or clearinghouse; or a confirmation received by a provider that the information shared with a health plan has been rejected or accepted. Transaction Standard: ASC X12N 277CA/999.

Transaction Highlights

1 Fully Automated

Throughout a patient encounter, plans, providers, and staff exchange various types of information, such as medical or clinical documentation, payments, or patient details. An acknowledgement confirms that a file or document has been received and accepted or rejected based on plan and standard requirements. Medical and dental plans reported that 100 percent of acknowledgements are sent electronically through auto-generated responses despite no federally mandated standard.

2 Volume Increased

For the first time, provider data is included in the medical and dental volumes. The addition of this data greatly increased overall volume. Comparative data will be trended in the 2025 CAQH Index report.

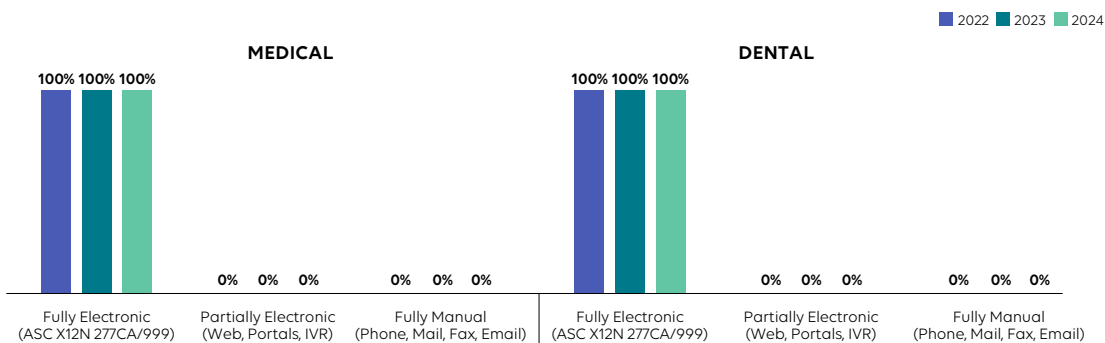


Patient Impact:

Electronic acknowledgements ensure that important documents, like medical records or payment information, are received and processed correctly, reducing delays in care and minimizing billing errors that could lead to unexpected costs.

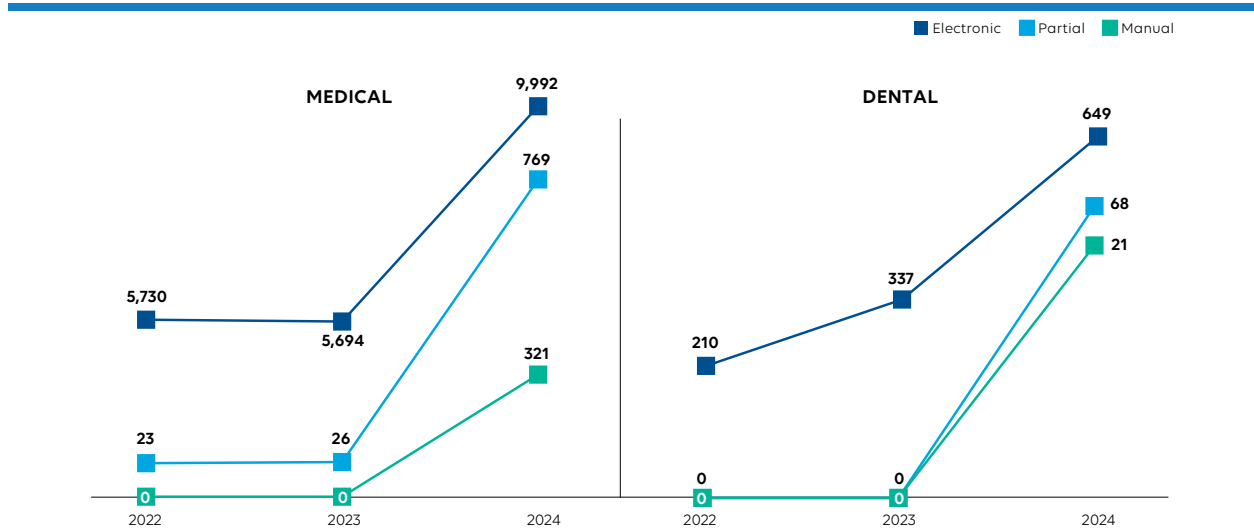
Adoption

Medical and Dental Plan Adoption of Acknowledgements 2022-2024 CAQH Index



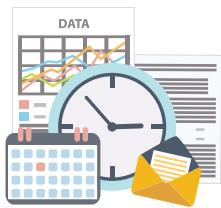
Volume

Estimated National Volume of Acknowledgements by Mode
2022-2024 CAQH Index (in millions)



May not be drawn to scale.

Electronic Acknowledgements



Time Savings Opportunity

Average Time Savings Opportunity (per transaction):



Medical Providers:
8 Minutes



Dental Providers:
5 Minutes

Coordination of Benefits

Definition:

Claims that are sent to secondary payers with explanation of payment information from the primary payer to determine remaining payment responsibilities. HIPAA Transaction Standard: ASC X12N 837.

Transaction Highlights

1 Medical Adoption Stable, Dental Dropped

When a patient has healthcare coverage under more than one plan, coordination of benefits (COB) determines which plan pays first for covered medical services or prescriptions and how much the second plan will cover after the first plan has paid. Health plans, providers, and patients are impacted by unnecessary costs and late payments when the COB process is not handled correctly.³⁰ Automated COB processes help ensure accurate and timely determinations, reducing paperwork, costly phone calls, and the frustration of dealing with denials, appeals and resubmissions.

In 2023, adoption of electronic COBs remained stable for medical plans at 90 percent and dropped three percentage points for dental plans to 49 percent.

2 Volume Decreased

Overall volume continued to drop for the medical and dental industries, seven and 27 percent, respectively, as the need to coordinate patient benefits among plans decreased. Medical and dental plans conducted fewer COBs using all methods of exchange — phone, fax, mail, email, portal and automated systems. A stable rate of unemployment in 2023³¹, may have resulted in fewer changes in insurance coverage and thus reduced the need to coordinate benefits.

3 Spending Decreased

As volume decreased, so did spend. Spending decreased 16 percent for the medical industry and 20 percent for the dental industry.

4 Medical Cost Saving Opportunity Decreased, Dental Remained Stable

For the medical industry, overall volume, spend, and unit costs associated with coordinating patient benefits decreased and plan adoption remained flat resulting in a 13 percent drop in the cost savings opportunity.

The savings opportunity remained stable for the dental industry as the increase in cost to coordinate benefits via phone, fax, email, and mail was countered by lower volume.

“If someone has secondary insurance we have to call, the portals don't really explain whether there's coordination of benefits or secondary benefits.”

– Dental Practice ”

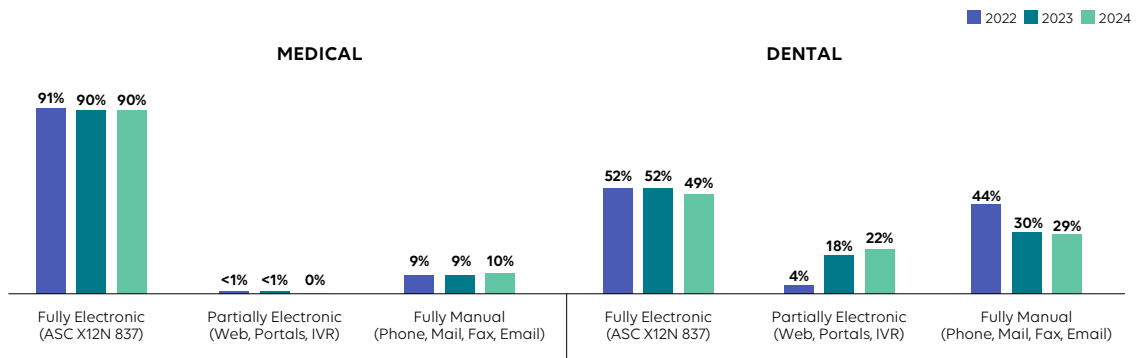


Patient Impact:

Delays from manual coordination of benefits can cause billing confusion and unexpected out-of-pocket costs as health plans work to determine who pays for what.

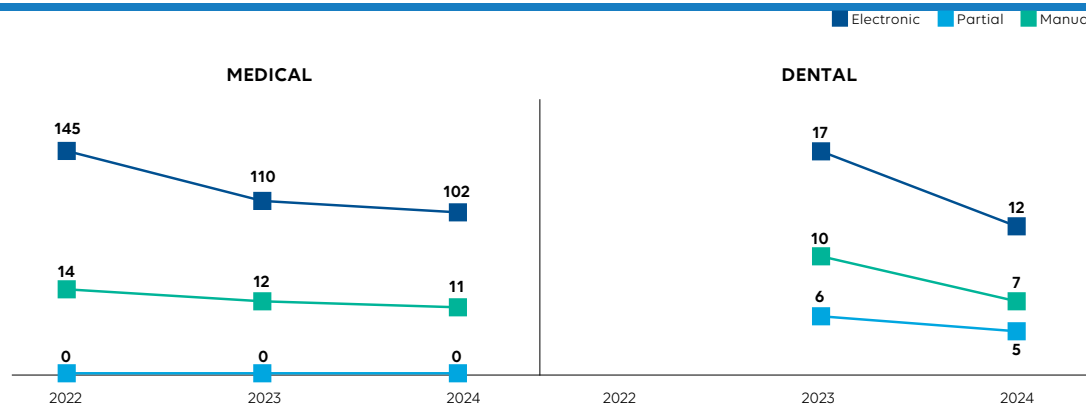
Adoption

**Medical and Dental Plan Adoption of Coordination of Benefits
2022-2024 CAQH Index**



Volume

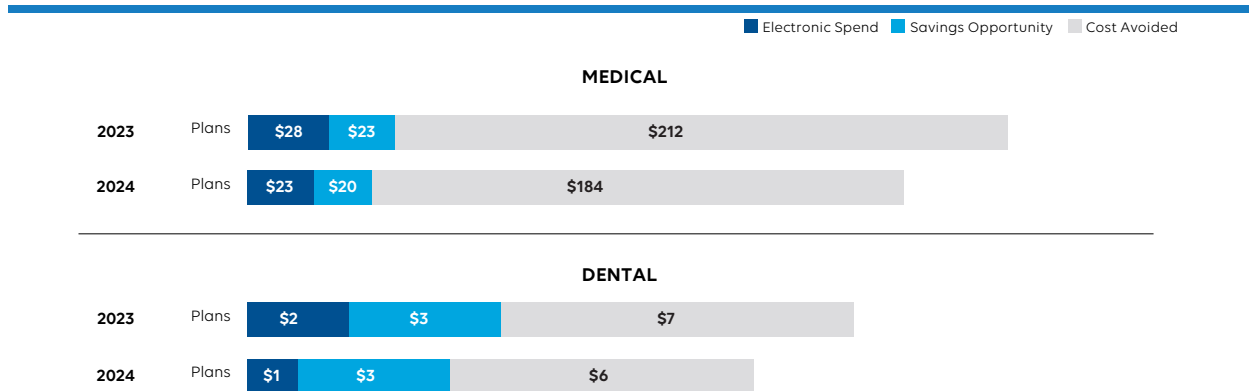
**Estimated National Volume of Coordination of Benefits by Mode
2022-2024 CAQH Index (in millions)**



May not be drawn to scale.

Spending & Savings

Coordination of Benefits: How Much is Spent and Saved with Full Adoption? 2023-2024 CAQH Index (in millions)



May not be drawn to scale.

Electronic Coordination of Benefits



Cost Savings Opportunity

\$23 Million
Combined
Cost Savings



Medical Industry:
\$20 Million



Dental Industry:
\$3 Million

Claim Status Inquiry

Definition:

An inquiry from a provider to a health plan to determine the status of a healthcare claim or a response from the health plan. HIPAA Transaction Standard: ASC X12N 276/277.

Transaction Highlights

1 Medical Adoption Increased — Highest Increase, Dental Remained Stable

Providers and staff often need to check the status of a submitted claim. Although an electronic standard exists to automatically make and respond to an inquiry, providers and staff frequently rely on time-consuming calls and faxes, creating extra administrative work for both plans and practices.

“We primarily call. I don’t know any insurance that you can email and get back a response within a few days.”

– Medical Practice

On an encouraging note, medical plans reported the largest increase in electronic adoption for claim status inquiries, six percentage points. Dental plan adoption of electronic inquiries remained stable at 28 percent.

2 Volume Increased

The number of inquiries conducted increased three percent for the medical industry and 19 percent for the dental industry as claim submission volume grew at similar rates for both industries (one and 10 percent, respectively). The increases were driven by growth in electronic volume, 12 percent for medical and 25 percent for dental.

While inquiries conducted by phone, fax, mail, and email decreased for the medical industry (25 percent) they increased for the dental industry (six percent) as dental providers and staff spent more time calling, faxing, and emailing plans to inquiry about payments.

3 Medical Spending Decreased, Dental Increased — Highest Provider Time


In 2023, medical spend associated with conducting claim status inquiries decreased 16 percent to \$11 billion — accounting for the third highest portion of the total spend — after increasing the previous year despite an uptick in provider costs to conduct manual inquiries by phone, fax, mail, and email. The increase in manual cost was countered by a substantial decrease in manual volume. The drop in manual volume is impactful as the time it took medical providers and staff to conduct an inquiry by phone was the highest among all the administrative tasks reported — 25 minutes per inquiry.

Conversely, the dental industry spent more money conducting inquiries, 15 percent, due to the increase in provider manual and electronic volumes and costs. Similar to the medical industry, dental providers and staff indicated that conducting inquiries by phone was the most time-consuming administrative task measured — 18 minutes per inquiry.

By moving away from burdensome phone calls and conducting inquiries via an automated process, the medical industry has already avoided spending \$29.5 billion annually while the dental industry has avoided spending \$888 million annually.

4 Cost Savings Opportunity Decreased

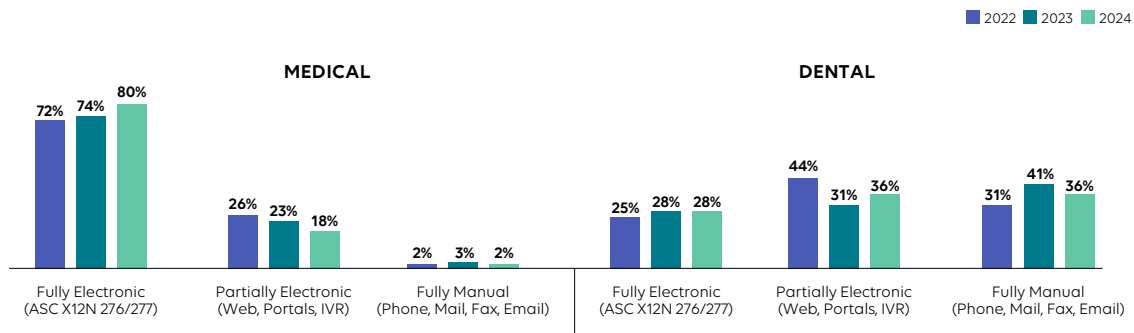
The cost savings opportunity continued to drop for the medical and dental industries, 26 and 10 percent, respectively. By conducting claim status inquiries using an automated workflow, the medical industry could save \$2.4 billion annually while the dental industry could save \$421 million annually.



Patient Impact:
Automating claim status inquiries could save the healthcare system billions, reducing administrative costs and freeing up resources to improve patient care and streamline the billing process.

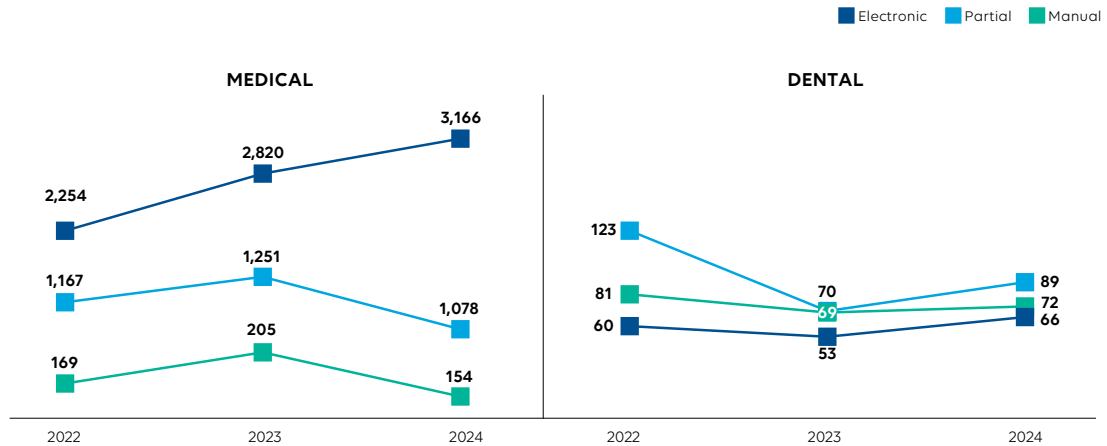
Adoption

Medical and Dental Plan Adoption of Claim Status Inquiry 2022-2024 CAQH Index



Volume

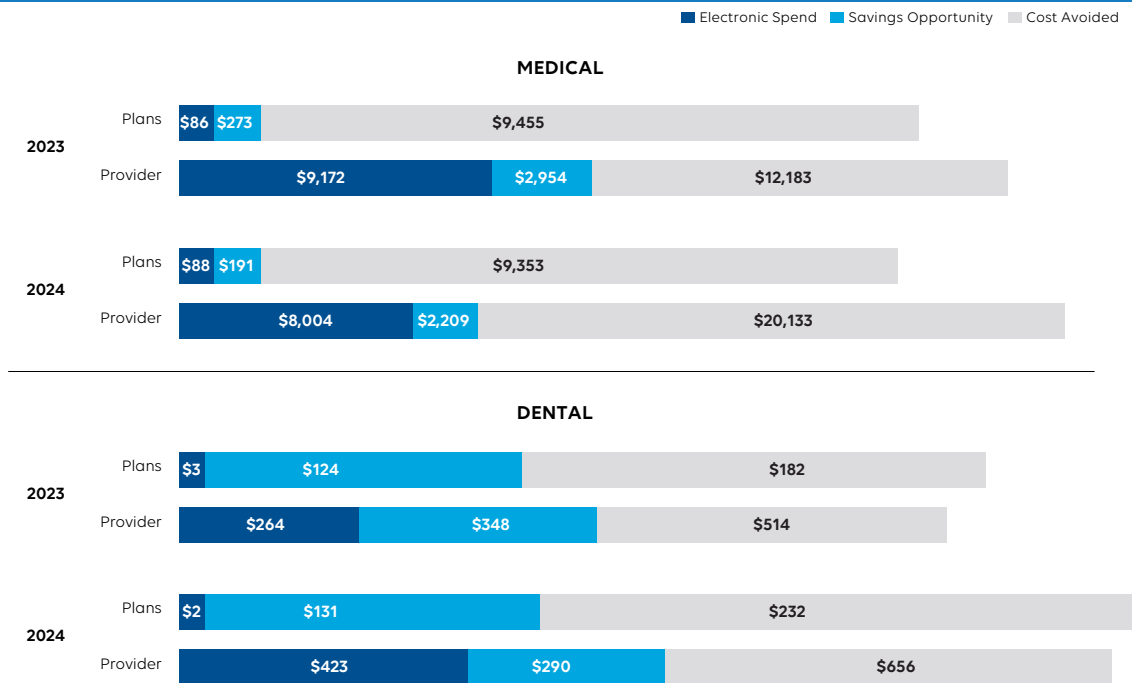
Estimated National Volume of Claim Status Inquiry by Mode
2022-2024 CAQH Index (in millions)



May not be drawn to scale.

Spending & Savings

Claim Status Inquiry: How Much is Spent and Saved with Full Adoption?
2023-2024 CAQH Index (in millions)



May not be drawn to scale.

Electronic Claim Status Inquiry



Cost Savings Opportunity

\$2.8 Billion
Combined
Cost Savings



Medical Industry:
\$2.4 Billion



Dental Industry:
\$421 Million



Time Savings Opportunity

Average Time
Savings Opportunity
(per transaction):



Medical Providers:
18 Minutes



Dental Providers:
12 Minutes

CAQH CORE Launches a Claim Status Workgroup

CAQH CORE research indicates that one reason providers rely on manual processes to inquire about a claim status is that they receive more robust information through these processes than through the ASC X12N 277 Claim Status response transaction. To help address this challenge, CORE launched a Claim Status Workgroup to close gaps in delivering providers key information regarding the status of an electronic claim along the adjudication workflow.

The Claim Status Workgroup is focusing on uniform and consistent status updates across all health plans for various business scenarios. For example, if a claim is pended and additional documentation is necessary for review and approval to pay, then the claim status transaction should indicate the specific documentation that a provider needs to send to remove the pend rather than a generic response, which may result in a provider calling or emailing to obtain the reason for the pend. Fostering robust and meaningful data exchanges will remove burden from both providers and health plans allowing them more time to focus on patient care.

Claim Payment

Definition:

An electronic funds transfer (EFT) from a health plan's bank to a provider's bank; including payment and data specific to the payment. HIPAA Transaction Standard: NACHA Corporate Credit or Deposit Entry with Addenda Record (CCD+).

Transaction Highlights

1 Adoption Increased — Highest for Dental

After a health plan processes a claim, payments to providers can be made by paper check, electronic funds transfer (EFT), or virtual credit card. Although EFTs are faster and more convenient,³² many providers, especially in the dental industry still use paper checks.

Thanks to EFT education and promotion by industry partners like the American Dental Association (ADA), National Association of Dental Plans (NADP), and Nacha,^{33,34} the dental industry has continued to see an increase in adoption of electronic payments. In 2023, the industry saw the largest increase in adoption among the administrative tasks at nine percentage points. The medical industry also reported an increase in adoption at four percentage points.



"Processing payments, sending out claims, I can do that all in 10 minutes. It used to take hours."

– Medical Practice

"The speed of [electronic] payment is much better. We expect to be paid within three days of filing, which most do. If we file by mail or fax, it usually takes a week or more."

– Dental Practice



2 Medical Volume Remained Flat, Dental Increased

The number of claim payments issued and received in the medical industry remained flat as the number of claims submitted also remained flat (increased one percent). Use of EFTs grew 10 percent while use of paper checks dropped 23 percent. The increase in EFT volume aligned with the increase reported by Nacha during this time frame, eight percent.³⁵

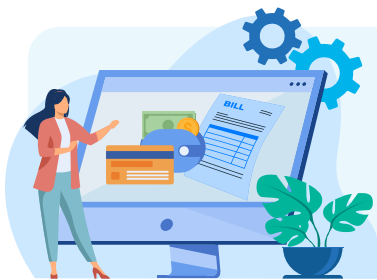
Payment volume rose for the dental industry, four percent. Similar to the medical industry, use of paper checks decreased (10 percent) while use of EFTs increased (43 percent). One large dental plan reported a substantial increase in EFTs given they migrated more lines of business to a payment vendor.

3 Medical Spending Increased — Highest for Medical, Dental Dropped

Although volume remained unchanged for the medical industry, spending increased 13 percent — the highest increase among the medical administrative tasks — as provider costs associated with making payments (via check or EFTs) rose due to the increase in salaries. Dental spending decreased four percent due to the large increase in EFTs, lower use of paper checks, and lower costs associated with using EFTs. By using EFTs, the dental industry has already avoided spending \$251 million annually — the most for any task reported.

4 Medical Cost Savings Opportunities Decreased, Dental Increased

The cost savings opportunity continued to drop for the medical industry, dropping 14 percent in 2023. Due to a decrease in the use of paper checks and increase in EFT volume and cost — there is less opportunity to save money by transitioning from paper checks to EFTs. Cost savings increased 36 percent for the dental industry after declining the previous year, as the cost of using paper checks rose, while the cost of using EFTs dropped, widening the gap between manual and electronic payments.

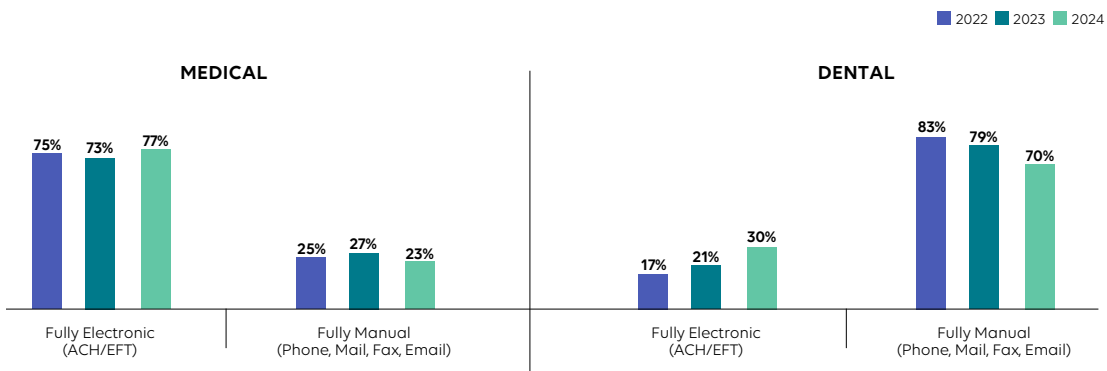


Patient Impact:

Electronic payments mean faster and more reliable payment processing, which helps providers focus on patient care instead of administrative tasks.

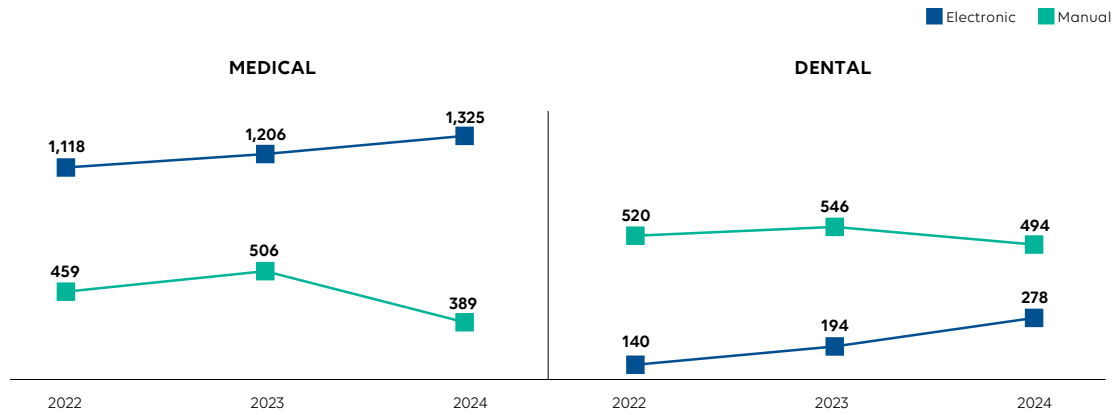
Adoption

Medical and Dental Plan Adoption of Claim Payment 2022-2024 CAQH Index



Volume

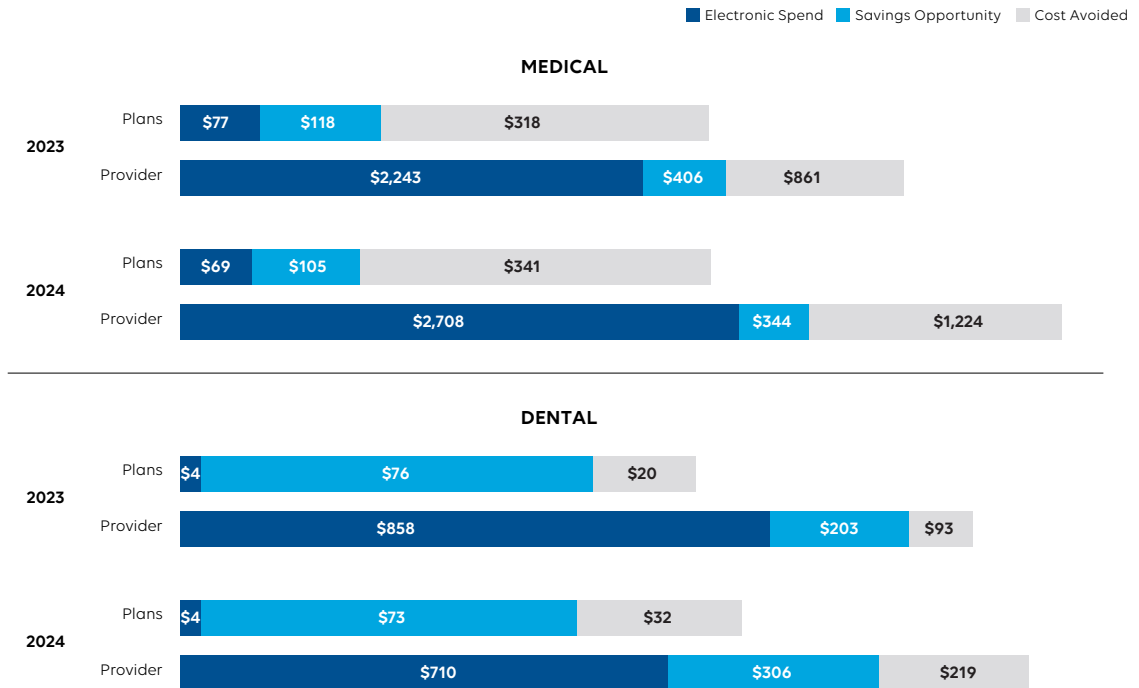
Estimated National Volume of Claim Payment by Mode
2022-2024 CAQH Index (in millions)



May not be drawn to scale.

Spending & Savings

Estimated National Volume of Claim Payment by Mode
2022-2024 CAQH Index (in millions)



May not be drawn to scale.

Electronic Claim Payment



Cost Savings Opportunity

\$828 Million
Combined
Cost Savings



Medical Industry:
\$449 Million



Dental Industry:
\$379 Million



Time Savings Opportunity

Average Time
Savings Opportunity
(per transaction):



Medical Providers:
3 Minutes



Dental Providers:
1 Minutes

Updated CORE Payment & Remittance (835) Operating Rules

In collaboration with Nacha, which manages the development, administration, and governance of the ACH Network, updates were made to the CORE Payment & Remittance EFT/ERA Enrollment Operating Rules. The updated rules were published in early 2024 and are available for industry adoption. Expanded requirements include adding process-oriented measures to enhance fraud detection, requiring disclosure of applicable EFT fees, providing language to support bulk enrollment, and establishing confirmation and acceptance requirements for health plans and their agents. In November of 2024, the CORE Board submitted a letter to the National Committee on Vital and Health Statistics (NCVHS) requesting consideration of a set of operating rules for federal adoption under HIPAA including the updated payment and remittance rules.

Remittance Advice

Definition:

The transmission of explanation of benefits or remittance advice from a health plan to a provider explaining a payment. HIPAA Transaction Standard: ASC X12N 835.

Transaction Highlights

1 Adoption Increased

When a claim is approved and payment is issued, a remittance advice is sent to the provider. This document explains the payment details, including the services covered, payment method, and any adjustments. Some providers and staff use multiple methods, like health plan portals and electronic remittance advices (ERAs), to access this information, which can lead to duplicate posting.

Adoption of ERAs increased one percentage point for the medical industry to 89 percent after increasing five percentage points the previous year. Dental adoption increased three percentage points.

2 Volume Increased

Overall medical volume increased by three percent, as ERA volume increased nine percent and manual and portal volume decreased nine and 27 percent, respectively.

The volume of remittance advices transmitted and received increased seven percent for the dental industry driven by a 24 percent increase in portal postings. The increase in portal and ERA use (five percent) suggests duplicate postings are occurring. Dental providers and staff have indicated that often remittance advice documents do not contain sufficient information. Therefore, they download electronic explanations of benefits (EOBs) from plan portals that tend to contain more details regarding payments allowing for easier reconciliation of claims.

3 Spending Increased

As overall medical volume and provider and staff costs to conduct a remittance advice increased, so did spend, by five percent. Spending for the dental industry increased 11 percent as the number of remittance advices transmitted and received via a portal and through phone, fax, email, and mail increased, and the cost it took providers and staff to handle these tasks increased.

4 Medical Cost Savings Opportunities Decreased, Dental Increased

Both industries experienced large decreases in cost savings opportunities the previous year. In 2023, the cost savings opportunity stabilized for the medical industry dropping only one percent. The increase in provider costs was countered by the drop in remittance advices conducted using portals and manual methods.

The dental industry reported a large increase in cost savings, 91 percent. This occurred as manual and portal volumes and costs increased and electronic volume and costs decreased.

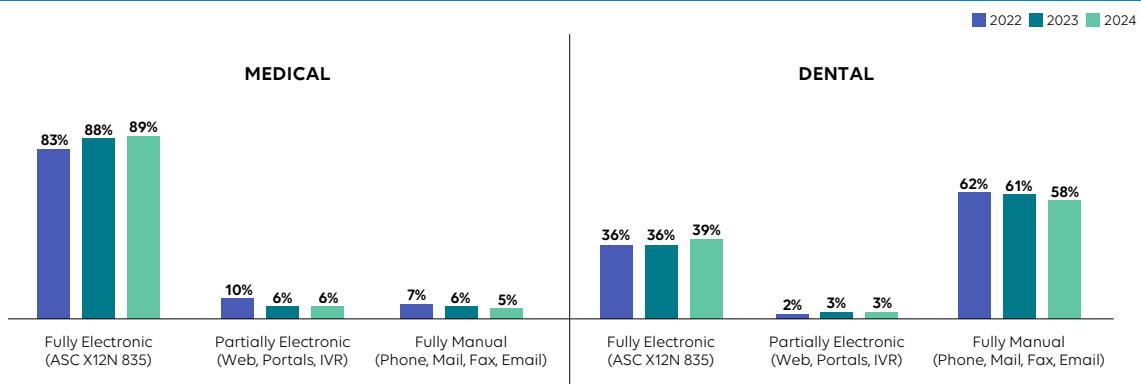


Patient Impact:

Clearer and more detailed payment information from health plans helps providers resolve claims faster, reducing the chances of billing mistakes or unexpected charges for patients.

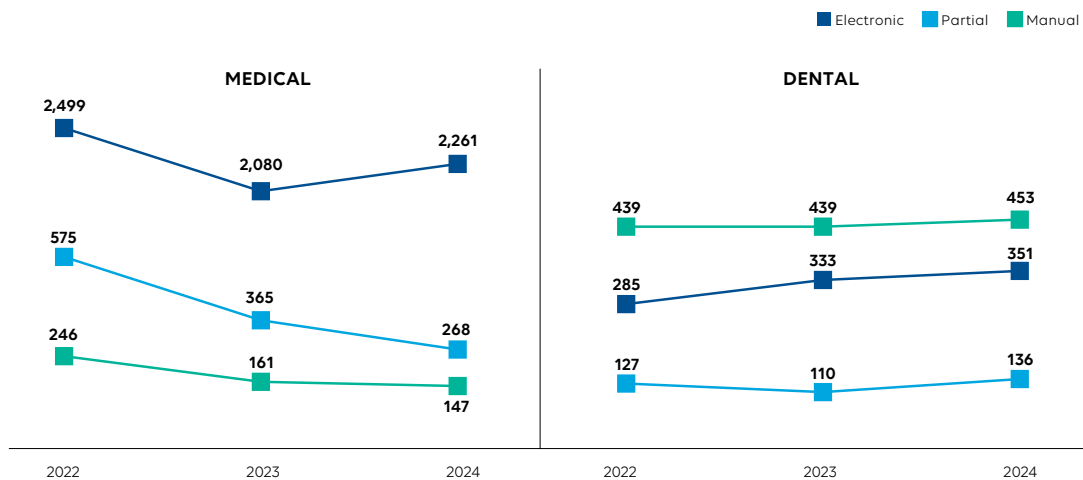
Adoption

**Medical and Dental Plan Adoption of Remittance Advice
2022-2024 CAQH Index**



Volume

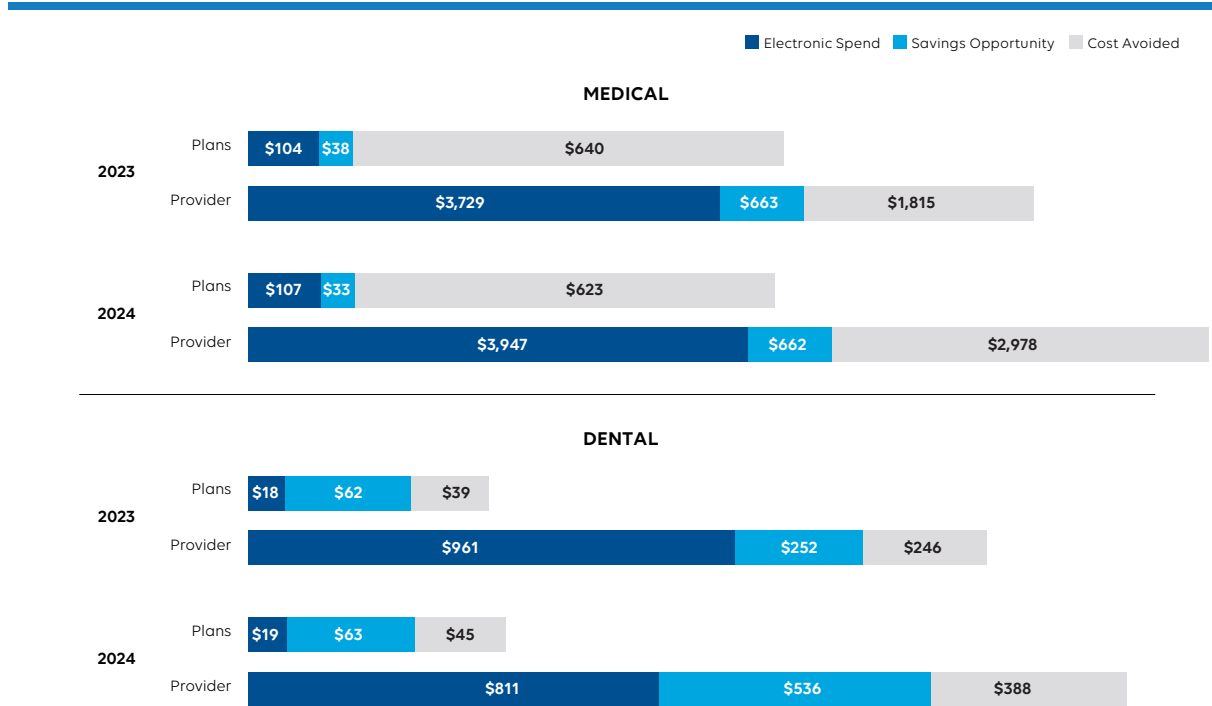
**Estimated National Volume of Remittance Advice by Mode
2022-2024 CAQH Index (in millions)**



May not be drawn to scale.

Spending & Savings

Remittance Advice: How Much is Spent and Saved with Full Adoption? 2023-2024 CAQH Index (in millions)



May not be drawn to scale.

Electronic Remittance Advice



Cost Savings Opportunity

\$1.3 Billion
Combined
Cost Savings



Medical Industry:
\$695 Million



Dental Industry:
\$599 Million



Time Savings Opportunity

Average Time
Savings Opportunity
(per transaction):



Medical Providers:
4 Minutes



Dental Providers:
3 Minutes



Overall Key Metrics



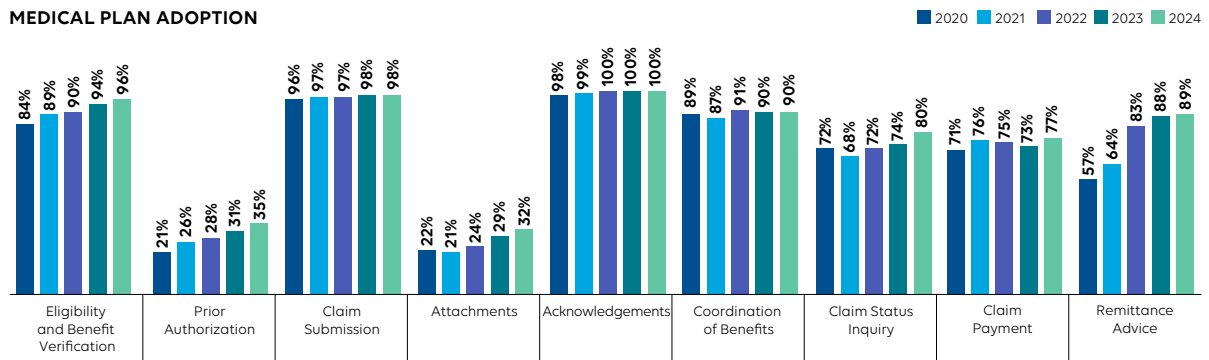
Overall Key Metrics

The CAQH Index benchmarks medical and dental industry adoption, volume, cost savings opportunities and spend for administrative transactions. Trending these metrics helps the industry measure progress towards an automated workflow while identifying areas for improvement.

Adoption

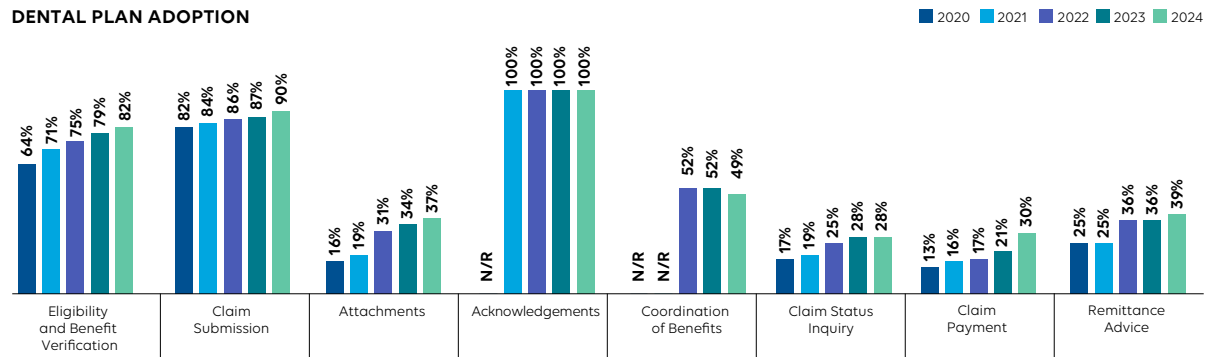
Medical Plan Adoption of Fully Electronic Administrative Transactions 2020-2024 CAQH Index

MEDICAL PLAN ADOPTION



Dental Plan Adoption of Fully Electronic Administrative Transactions 2020-2024 CAQH Index

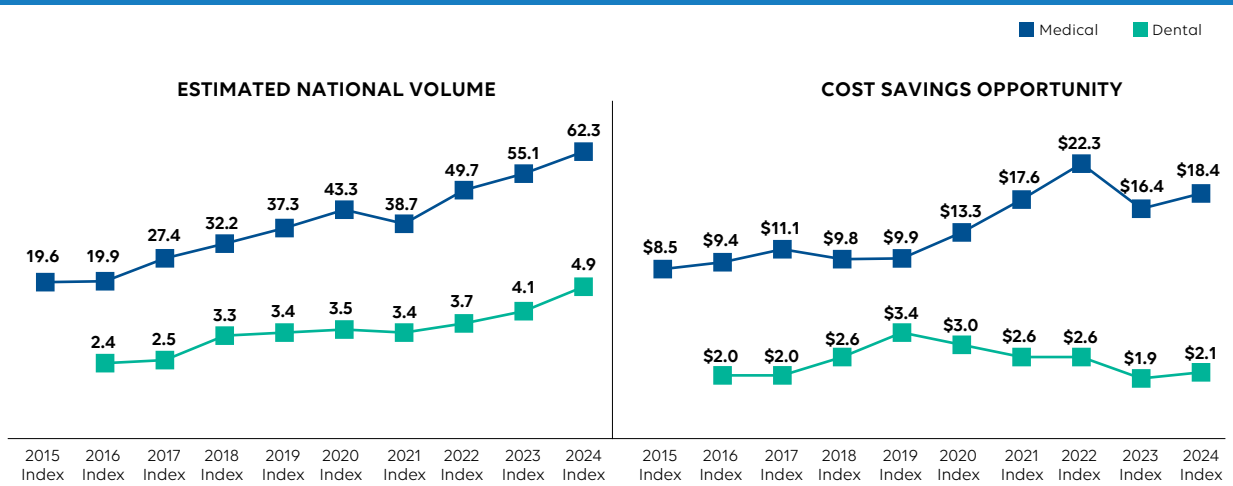
DENTAL PLAN ADOPTION



N/R = Not Reported

Volume

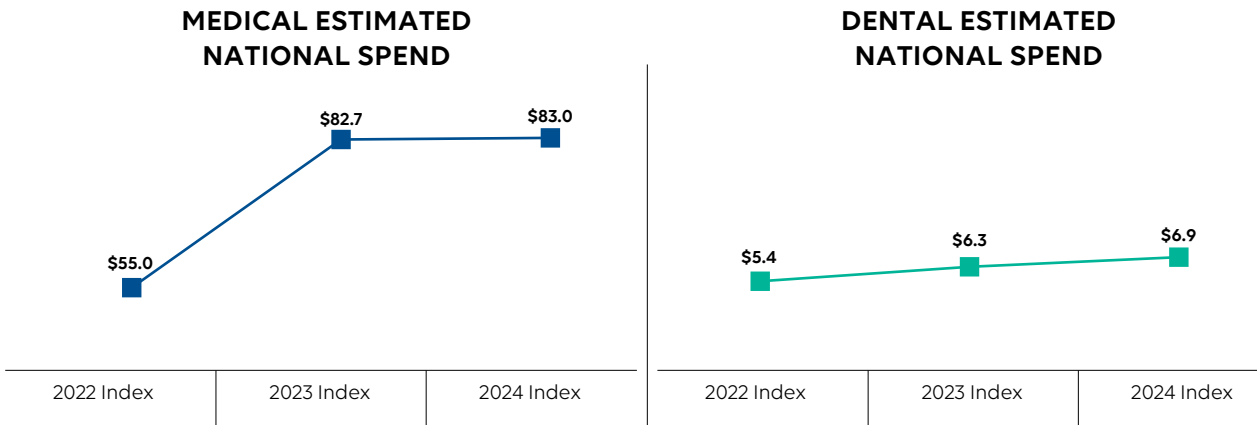
Medical and Dental Industry Estimated National Volume and Cost Savings Opportunity 2015-2024 CAQH Index (in billions)



Note: From year to year, reported transactions may change due to low volume collected. May not be drawn to scale.

Administrative Spend

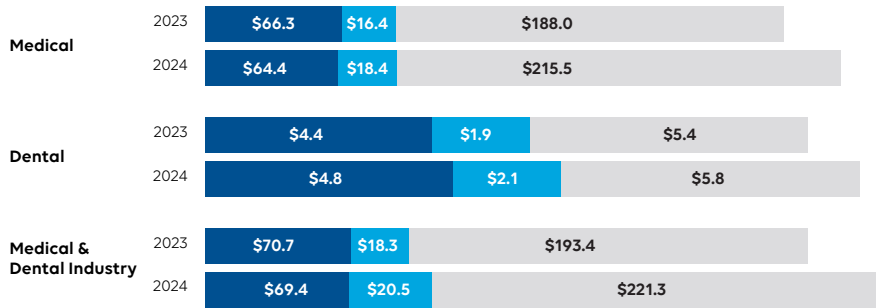
Medical and Dental Industry Estimated National Administrative Spend 2022-2024 CAQH Index (in billions)



Note: From year to year, reported transactions may change due to low volume collected. May not be drawn to scale.

Medical and Dental Industry Estimated National Spend and Savings 2023-2024 CAQH Index (in billions)

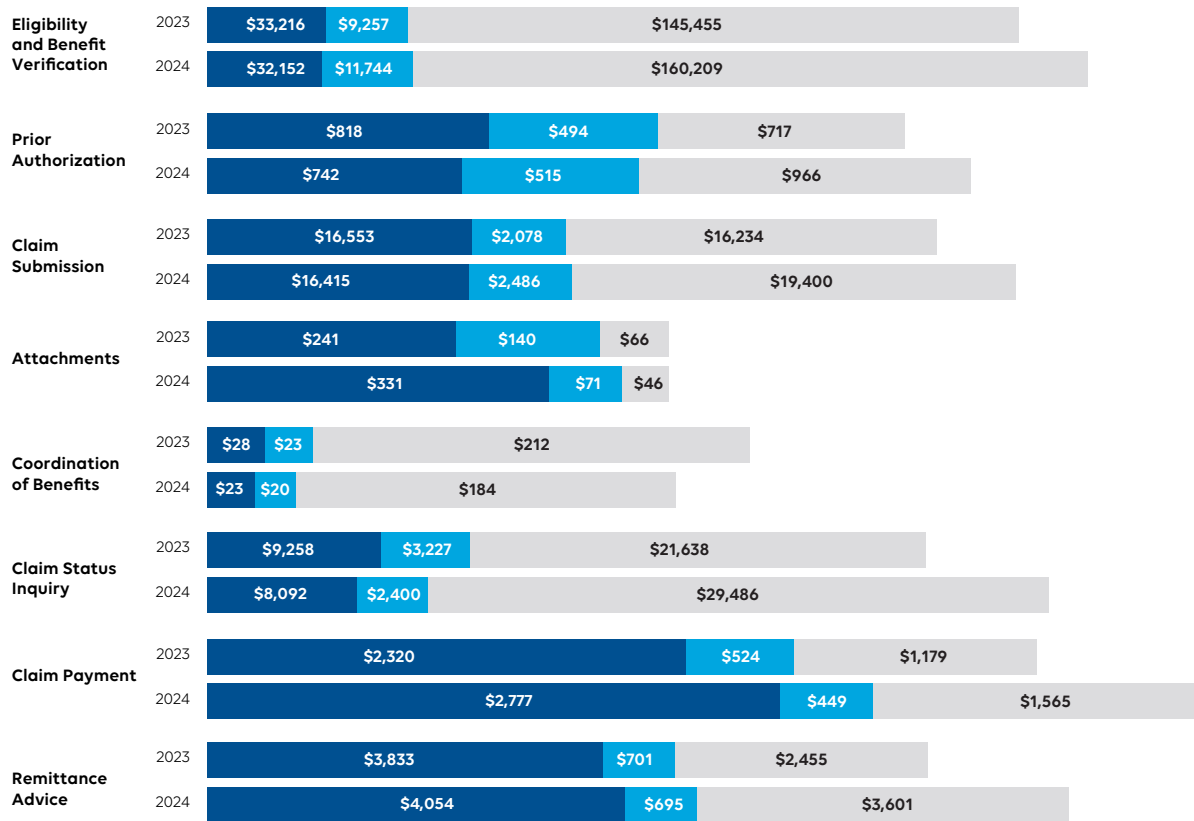
■ Electronic Spend + ■ Savings Opportunity = Estimated spend ■ Electronic Spend + ■ Savings Opportunity + ■ Cost Avoided = Estimated spend if all transactions were manual



Note: May not be drawn to scale.

Medical Industry Estimated National Spend and Savings by Transaction 2023-2024 CAQH Index (in millions)

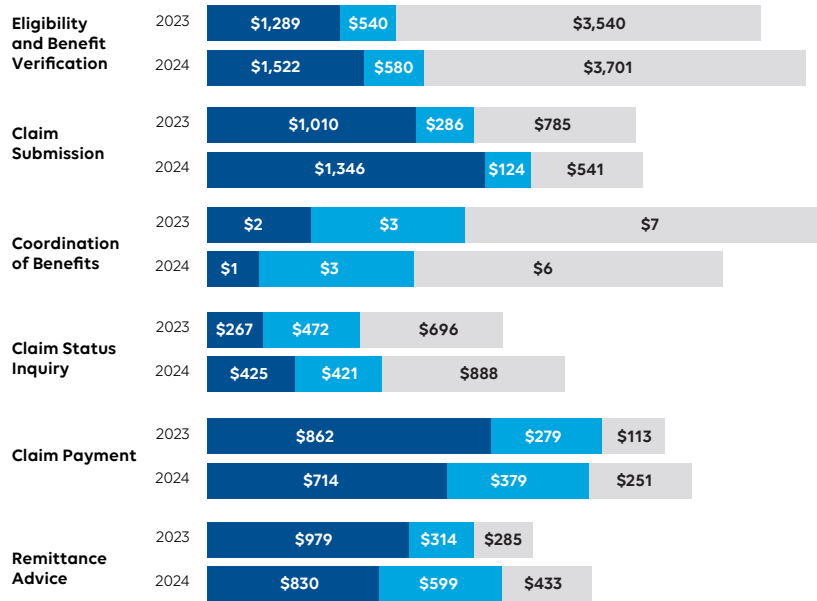
■ Electronic Spend + ■ Savings Opportunity = Estimated spend ■ Electronic Spend + ■ Savings Opportunity + ■ Cost Avoided = Estimated spend if all transactions were manual



Note: May not be drawn to scale.

Dental Industry Estimated National Spend and Savings by Transaction 2023-2024 CAQH Index (in millions)

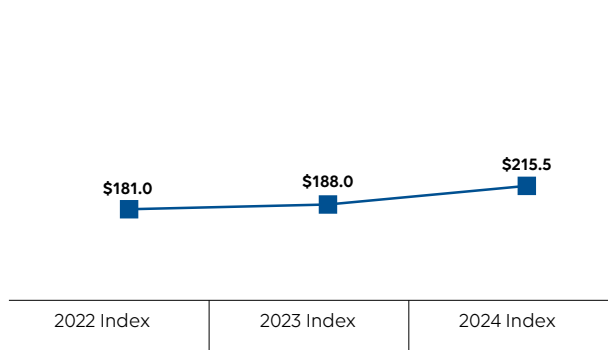
■ Electronic Spend + ■ Savings Opportunity = Estimated spend ■ Electronic Spend + ■ Savings Opportunity + ■ Cost Avoided = Estimated spend if all transactions were manual



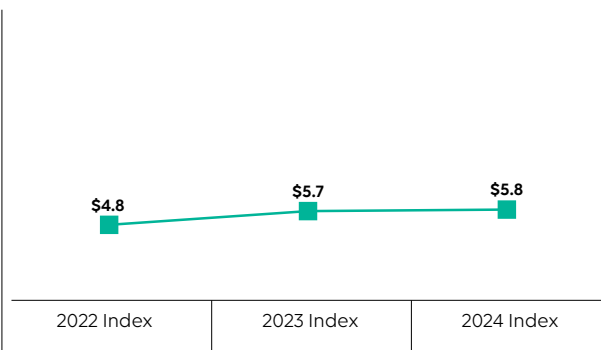
Note: May not be drawn to scale.

Medical and Dental Industry Estimated National Cost Avoided 2022-2024 CAQH Index (in billions)

MEDICAL COST AVOIDED

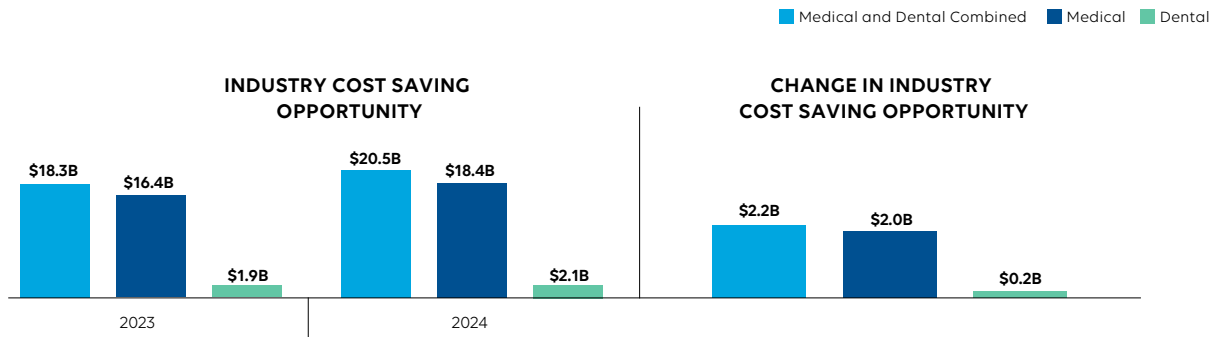


DENTAL COST AVOIDED



Note: From year to year, reported transactions may change due to low volume collected. May not be drawn to scale.

Medical and Dental Industry Estimated Cost Savings Opportunity and Year-Over-Year Change 2023-2024 CAQH Index



Note: From year to year, reported transactions may change due to low volume collected.





Cost Savings Opportunity Tables

The tables listed below include, by mode, the average cost per transaction, estimated national volume and cost savings opportunities for medical and dental plans and providers. Understanding the cost and volume of administrative transactions along with the savings associated with switching to fully electronic transactions helps organizations identify and target pain points.

Average Cost and Savings Opportunity per Transaction by Mode, Medical, 2024 CAQH Index

Transaction	Mode	Plan Cost	Provider Cost	Industry Cost	Plan Cost Savings Opportunity	Provider Cost Savings Opportunity	Industry Cost Savings Opportunity
Eligibility and Benefit Verification	Manual	\$ 4.38	\$ 8.57	\$12.95	\$ 4.34	\$ 6.57	\$10.91
	Partial	\$ 0.04	\$ 4.46	\$ 4.50	\$ 0.00	\$ 2.46	\$ 2.46
	Electronic	\$ 0.04	\$ 2.00	\$ 2.04			
Prior Authorization	Manual	\$ 3.41	\$ 12.88	\$16.29	\$ 3.36	\$ 7.50	\$10.86
	Partial	\$ 0.05	\$ 8.93	\$ 8.98	\$ 0.00	\$ 3.55	\$ 3.55
	Electronic	\$ 0.05	\$ 5.38	\$ 5.43			
Claim Submission	Manual	\$ 1.02	\$ 6.33	\$ 7.35	\$ 0.92	\$ 3.28	\$ 4.20
	Electronic	\$ 0.10	\$ 3.05	\$ 3.15			
Attachments	Manual	\$ 0.76	\$ 5.54	\$ 6.30	\$ 0.62	\$ 1.03	\$ 1.65
	Electronic	\$ 0.14	\$ 4.51	\$ 4.65			
Coordination of Benefits	Manual	\$ 2.01	N/A	\$ 2.01	\$ 1.80	N/A	\$ 1.80
	Partial	\$ 0.21	N/A	\$ 0.21	\$ 0.00	N/A	\$ 0.00
	Electronic	\$ 0.21	N/A	\$ 0.21			
Claim Status Inquiry	Manual	\$ 4.38	\$13.80	\$ 18.18	\$ 4.34	\$ 10.16	\$14.50
	Partial	\$ 0.04	\$ 5.24	\$ 5.28	\$ 0.00	\$ 1.60	\$ 1.60
	Electronic	\$ 0.04	\$ 3.64	\$ 3.68			
Claim Payment	Manual	\$ 0.60	\$ 4.99	\$ 5.59	\$ 0.52	\$ 1.83	\$ 2.35
	Electronic	\$ 0.08	\$ 3.16	\$ 3.24			
Remittance Advice	Manual	\$ 0.57	\$ 5.67	\$ 6.24	\$ 0.49	\$ 2.72	\$ 3.21
	Partial	\$ 0.08	\$ 5.31	\$ 5.39	\$ 0.00	\$ 2.36	\$ 2.36
	Electronic	\$ 0.08	\$ 2.95	\$ 3.03			

N/A = Not Applicable; Note: Costs include the labor time required to conduct the transaction, not the time and cost associated with gathering information for the transaction and follow-up. Does not include system costs. All participants were asked to report cost for each transaction by the three modes of completion (manual, partially electronic, electronic). For some transactions, partial costs were not reported.

Average Cost and Savings Opportunity per Transaction by Mode, Dental, 2024 CAQH Index

Transaction	Mode	Plan Cost	Provider Cost	Industry Cost	Plan Cost Savings Opportunity	Provider Cost Savings Opportunity	Industry Cost Savings Opportunity
Eligibility and Benefit Verification	Manual	\$ 3.20	\$ 6.52	\$ 9.72	\$ 3.18	\$ 3.99	\$ 7.17
	Partial	\$ 0.04	\$ 4.37	\$ 4.41	\$ 0.02	\$ 1.84	\$ 1.86
	Electronic	\$ 0.02	\$ 2.53	\$ 2.55			
Claim Submission	Manual	\$ 0.56	\$ 3.64	\$ 4.20	\$ 0.46	\$ 0.93	\$ 1.39
	Electronic	\$ 0.10	\$ 2.71	\$ 2.81			
Coordination of Benefits	Manual	\$ 0.44	N/A	\$ 0.44	\$ 0.38	N/A	\$.38
	Partial	\$ 0.07	N/A	\$ 0.07	\$ 0.01	N/A	\$ 0.01
	Electronic	\$ 0.06	N/A	\$ 0.06			
Claim Status Inquiry	Manual	\$ 3.20	\$ 12.01	\$ 15.21	\$ 3.18	\$ 8.30	\$ 11.48
	Partial	\$ 0.04	\$ 4.22	\$ 4.26	\$ 0.02	\$ 0.51	\$ 0.53
	Electronic	\$ 0.02	\$ 3.71	\$ 3.73			
Claim Payment	Manual	\$ 0.28	\$ 3.20	\$ 3.48	\$ 0.27	\$ 1.36	\$ 1.63
	Electronic	\$ 0.01	\$ 1.84	\$ 1.85			
Remittance Advice	Manual	\$ 0.27	\$ 3.70	\$ 3.97	\$ 0.23	\$ 1.97	\$ 2.20
	Partial	\$ 0.04	\$ 3.25	\$ 3.29	\$ 0.00	\$ 1.52	\$ 1.52
	Electronic	\$ 0.04	\$ 1.73	\$ 1.77			

Note: Costs include the labor time required to conduct the transaction, not the time and cost associated with gathering information for the transaction and follow-up. Does not include system costs. All participants were asked to report cost for each transaction by the three modes of completion (manual, partially electronic, electronic). For some transactions, partial costs were not reported.

Estimated National Volume and Cost Savings Opportunity by Mode, Medical, 2024 CAQH Index

Transaction	Mode	Plan National Volume	Provider National Volume	Plan National Cost Savings Opportunity	Provider National Cost Savings Opportunity	Industry National Cost Savings Opportunity
		(in millions)		(in millions \$)		
Eligibility and Benefit Verification	Manual	56	572			
	Partial	618	3,147	\$ 244	\$ 11,500	\$ 11,744
	Electronic	15,087	12,042			
Prior Authorization	Manual	30	24			
	Partial	58	65	\$ 101	\$ 414	\$ 515
	Electronic	48	47			
Claim Submission	Manual	92	732	\$ 85	\$ 2,401	\$ 2,486
	Electronic	5,119	4,479			
Attachments	Manual	48	40	\$ 30	\$ 41	\$ 71
	Electronic	23	31			
Acknowledgements	Manual	0	321			
	Partial	25	744	N/R	N/R	N/R
	Electronic	5,516	4,476			
Coordination of Benefits	Manual	11	N/A			
	Partial	0	N/A	\$ 20	N/A	\$ 20
	Electronic	102	N/A			
Claim Status Inquiry	Manual	44	110			
	Partial	396	682	\$ 191	\$ 2,209	\$ 2,400
	Electronic	1,759	1,407			
Claim Payment	Manual	201	188	\$ 105	\$ 344	\$ 449
	Electronic	656	669			
Remittance Advice	Manual	67	80			
	Partial	80	188	\$ 33	\$ 662	\$ 695
	Electronic	1,191	1,070			

*Transaction volume is less than one million.

N/A = Not Applicable

N/R = Not Reported

Note: Costs include the labor time required to conduct the transaction, not the time and cost associated with gathering information for the transaction and follow-up. Does not include system costs. All participants were asked to report cost for each transaction by the three modes of completion (manual, partially electronic, electronic). For some transactions, partial costs were not reported.

Estimated National Volume and Cost Savings Opportunity by Mode, Dental, 2024 CAQH Index

Transaction	Mode	Plan National Volume	Provider National Volume	Plan National Cost Savings Opportunity	Provider National Cost Savings Opportunity	Industry National Cost Savings Opportunity
		(in millions)		(in millions \$)		
Eligibility and Benefit Verification	Manual	21	27			
	Partial	88	219	\$ 69	\$ 511	\$ 580
	Electronic	488	351			
Claim Submission	Manual	50	109			
	Electronic	429	370	\$ 23	\$ 101	\$ 124
Attachments	Manual	45	N/R			
	Electronic	26	N/R	N/R	N/R	N/R
Acknowledgements	Manual	0	21			
	Partial	0	68	N/R	N/R	N/R
	Electronic	369	280			
Coordination of Benefits	Manual	7	N/A			
	Partial	5	N/A	\$ 3	N/A	\$ 0
	Electronic	12	N/A			
Claim Status Inquiry	Manual	41	32			
	Partial	41	48	\$ 131	\$ 290	\$ 421
	Electronic	32	34			
Claim Payment	Manual	269	225			
	Electronic	117	161	\$ 73	\$ 306	\$ 379
Remittance Advice	Manual	276	177			
	Partial	13	123	\$ 63	\$ 536	\$ 599
	Electronic	182	169			

N/A = Not Applicable

N/R = Not Reported

Note: Costs include the labor time required to conduct the transaction, not the time and cost associated with gathering information for the transaction and follow-up. Does not include system costs. All participants were asked to report cost for each transaction by the three modes of completion (manual, partially electronic, electronic). For some transactions, partial costs were not reported.

A network diagram consisting of several nodes (small circles) connected by thin lines, forming a complex web. The nodes are distributed across the top and bottom of the page, with a higher density at the top. The lines are light blue and the nodes are a slightly darker shade of blue.

Methodology & Transaction Definitions

Background

The CAQH Index tracks the industry adoption of electronic administrative transactions over time. It measures industry volume, spend, cost avoided, and the cost savings opportunity associated with switching from conducting partially electronic and manual transactions to using fully electronic transactions. The 2024 CAQH Index is the 12th annual report which collects data from medical and dental plans and providers covering more than half of the insured United States population, according to enrollment reports from the AIS Directory of Health Plans and NADP Dental Health Plan Profiles.^{36,37}

Recruitment

Medical and dental plans and providers were recruited to participate in the study using direct outreach through email and telephone, industry conferences, webinars, the CAQH website and social media. CAQH managed the medical and dental plan and provider recruitment, including developing the recruitment list and sending email invitations, while collaborating with NORC at the University of Chicago³⁸ on the recruitment, data collection and analysis of data for medical and dental providers. Plans and providers included those that participated in the CAQH Index previously, as well as additional contacts from plan and provider organizations engaged with other CAQH initiatives. Additionally, NORC contacted and updated the legacy contact list and hospital list to recruit additional provider participants. CAQH also partnered with CAQH member organizations, the CAQH Index Advisory Council, the Workgroup for Electronic Data Interchange (WEDI), the American Dental Association (ADA), the American Hospital Association (AHA) and the American Medical Association (AMA) to increase participation in the survey.

All CAQH Index participants receive a benchmark report comparing their data to the aggregate industry results. Medical and dental providers along with hospitals were also offered honorariums to encourage participation in the survey.

New for the 2024 CAQH Index, NORC conducted follow-up interviews with providers based on consent provided at the end of the survey. NORC reached out to consenting providers with interview requests, as well as providers whose survey responses did not meet minimum data standards. Any provider who participated in a follow-up interview received an additional honorarium.

Data Collection

The CAQH Index collected data through a voluntary online survey tool from July to September 2024. A fillable PDF and Excel version of the survey were also offered to participants. Plan and provider data are representative of the 2023 calendar year, January 1 to December 31, 2023. The medical plan survey collected data on 10 administrative transactions and the dental plan survey collected data on nine. For providers, data was collected for 10 medical and eight dental transactions.

Supplemental Questions

The medical and dental plan survey also included supplemental questions regarding:

- An additional standard for acknowledgement (X12 824).
- Use of proprietary reports for acknowledgement.
- An additional mode for attachments (electronically through a clearinghouse).
- Preparation for the Interoperability and Prior Authorization Final Rule³⁹ – implementation of electronic prior authorization (e-PA) (Medical plans only).

- Use of artificial intelligence (AI) for clinical and administrative tasks.
- Impact of the Change Healthcare cyberattack.
- Challenges associated with automating administrative tasks.

The medical provider survey collected data on eight administrative transactions and two pharmacy transactions, Prescription/Drug Prior Authorization (NCPDP SCRIPT) and Realtime Pharmacy Benefit Prescription Check (NCPDP RTPB) while the dental provider survey included six administrative transactions.

For medical and dental providers, this year's survey included supplemental questions regarding:

- Role within the practice (clinical or administrative)
- Use of the NCPDP drug formulary and benefit standard (Medical providers only).
- Use of artificial intelligence (AI) for clinical and administrative tasks.
- Impact of the Change Healthcare cyberattack.
- Challenges associated with automating administrative tasks.

Issue briefs on these topics may be released later this year.

Provider Interviews

The 2024 CAQH Index included follow-up interviews with providers whose survey responses did not meet minimum data standards and those who agreed to participate in additional questions. The interviews provided clarity to responses, contextual information to help inform the survey findings and real-life insights making the data more relevant and meaningful to the industry.

Providers were contacted by email following the completion of their survey to schedule an interview. Interviews were conducted via

Zoom with NORC staff using a standardized questionnaire developed by CAQH in collaboration with NORC. The interviews lasted approximately 15 minutes. Questions focused on the following topics:

- Implementation of various transactions and how the process may have shifted over the past year.
- Specialist and behavioralist processing times.
- Staffing challenges.
- Barriers to implementing fully electronic transactions.

Interviews were recorded, and later transcribed by NORC staff. CAQH was provided with major interview themes and thematic quotes. No individual provider information was shared with CAQH.

Imputations

To ensure that responses were accurate, logic checks were embedded in the online survey tool for plans and providers to check for data reliability and accuracy for all transactions. Logic checks included a request for additional information if estimates were outside specified bounds. For example, in the provider surveys, if electronic times were three minutes or more, participants were asked to provide an explanation of the process.

Even with logic checks, some responses were insufficient or out of range. When this occurred, NORC followed up with respondents to obtain clarity. If clarity was not obtained, values were imputed using the following rules.

- For processing time values, if a respondent provided information that was greater than the median value plus the Interquartile Range multiplied by 2, the processing time was imputed using the median value plus the Interquartile Range multiplied by 2. In cases where partial time was the same as manual time, partial time was imputed.

- For salary values, if a respondent provided information that was greater than the median value plus the Interquartile Range multiplied by two, the processing time was imputed with the median value plus the Interquartile Range multiplied by three. In cases where the reported salary was less than the Median-Interquartile Range, the salary was imputed to the Median-Interquartile Range, or \$20,000, whichever was lower.
- For volumes, transaction volumes that were much higher than expected were imputed using the following rules: If there were fewer than 20 providers on staff, and the total monthly transaction volume was higher than 12*Median transaction volume, the transactions for all categories were assumed to be annual, rather than monthly, and recalculated accordingly.

Overview of Fully Electronic Administrative Transactions Studied, 2024 CAQH Index:

Transaction	Transaction Standard	Definition
Eligibility and Benefit Verification†	ASC X12N 270/271	An inquiry from a provider to a health plan or from one health plan to another to obtain eligibility, coverage or benefits associated with the plan and a response from the health plan to the provider.
Prior Authorization	ASC X12N 278	A request from a provider to a health plan to obtain authorization for healthcare services or a response from a health plan for an authorization. Does not include referrals.
Claim Submission	ASC X12N 837	A request to obtain payment or transmission of encounter information for the purpose of reporting delivery of healthcare services.
Attachments	ASC X12N 275, HL7 CDA*	Additional information submitted with claims for payment, claim appeals or prior authorization, such as medical records to support a claim or to explain the need for a procedure or service.
Acknowledgements	ASC X12N 277CA/999	A health plan's response to a provider or provider's clearinghouse that they received information from the provider or clearinghouse; or confirmation received by a provider that the information shared with a health plan has been rejected or accepted.
Coordination of Benefits	ASC X12N 837	Claims that are sent to secondary payers with explanation of payment information from the primary payer to determine remaining payment responsibilities.
Claim Status Inquiry†	ASC X12N 276/277	An inquiry from a provider to a health plan to determine the status of a health care claim or a response from the health plan.
Claim Payment†	NACHA Corporate Credit or Deposit Entry with Addenda Record (CCD+)	An electronic funds transfer (EFT) from a health plan's bank to a provider's bank; including payment and data specific to the payment.
Remittance Advice†	ASC X12N 835	The transmission of explanation of benefits or remittance advice from a health plan to a provider explaining a payment.

† Both HIPAA standards and CAQH CORE Operating Rules are federally mandated.

* ASC X12N 275 and HL7 CDA are both industry recognized standards for electronic attachments.

Medical plans represented 216 million covered lives, or 63 percent of the United States enrolled population. Medical plans accounted for three billion claims received and 17 billion transactions annually. In comparison, dental plans represented 136 million covered lives and approximately 47 percent of the enrolled population. Dental plans represented a smaller portion of volume with 223 million claims received and a total of 967 million transactions.

Basic Characteristics of Data Contributors, 2018-2024 CAQH Index

	2018 Index	2019 Index	2020 Index	2021 Index	2022 Index	2023 Index	2024 Index
MEDICAL							
Plan Members (total in millions)	160	154	167	202	204	209	216
Proportion of Total Enrollment (%)	49	47	51	61	60	60	63
Number of Claims Received (total in billions)	2	2	2	2	3	3	3
Number of Transactions (total in billions)	8	8	10	12	14	15	17
DENTAL							
Plan Members (total in millions)	106	111	112	116	126	127	136
Proportion of Total Enrollment (%)	44	44	43	44	48	45	47
Number of Claims Received (total in millions)	177	185	186	156	201	199	223
Number of Transactions (total in millions)	731	726	740	703	828	851	967

Annual Volume Reported by Medical and Dental Plans, 2023-2024 CAQH Index

Transaction	Number of Transactions (in millions)				Number of Transactions (per member)			
	2023 Index		2024 Index		2023 Index		2024 Index	
	Medical	Dental	Medical	Dental	Medical	Dental	Medical	Dental
Eligibility and Benefit Verification	8,383	218	9,958	278	39	2	46	2
Prior Authorization	54	N/R	54	N/R	<1	N/R	<1	N/R
Claim Submission	3,103	199	3,292	223	15	2	15	2
Attachments	37	6	40	8	<1	<1	<1	<1
Acknowledgements	1,457	25	1,471	26	7	<1	7	<1
Coordination of Benefits	60	2	57	2	<1	<1	<1	<1
Claim Status Inquiry	1,282	43	1,372	53	6	<1	6	<1
Claim Payment	299	169	333	179	1	1	2	1
Remittance Advice	782	190	835	197	4	2	4	2
Total Transactions	15,457	852	17,413	967	72	7	80	7

N/R = Not Reported

Metrics

Results were aggregated to ensure data privacy. Benchmarks were calculated and reported only for transactions where three or more plans participated. The following metrics were reported for each transaction:

Adoption Rate — The degree to which medical and dental plans and providers complete transactions using fully electronic, partially electronic, or manual modes.

Estimated Volume — The number of fully electronic, partially electronic and manual transactions reported by medical and dental plans and providers weighted to a national level.

Cost Per Transaction — The labor costs (e.g., salaries, wages, personnel benefits, and related overhead costs) associated with fully electronic, partially electronic, and fully manual transactions as reported by medical and dental plans and providers. Costs include the labor time required to conduct the transaction, not the time and cost associated with gathering

information for the transaction and follow-up. Costs do not include system costs (e.g., maintaining, building, or buying software or other equipment).

Administrative Spend (Estimated Spend) — The amount that medical and dental plans and providers spend conducting a transaction in total and by modality.

Cost Avoided — The amount that medical and dental plans and providers have saved by not conducting transactions using partially electronic or fully manual modes.

Cost Savings Opportunity — The cost savings that could be achieved by switching the remaining partially electronic and fully manual transactions to fully electronic transactions.

Time to Conduct — The time required for providers to conduct a fully electronic, partially electronic and fully manual transaction.

Time Savings Opportunity — The time that providers could save by switching the remaining partially electronic and fully manual time to conduct a transaction to a fully electronic time.

Overview of Reported Data and Benchmarks per Transaction, 2024 CAQH Index

Transaction	Adoption		Cost per Transaction		National Spend and Cost Savings Opportunity		Time to Conduct a Transaction		First Index Report Year Studied	
	Medical	Dental	Medical	Dental	Medical	Dental	Medical	Dental	Medical	Dental
Eligibility and Benefit Verification	●	●	●	●	●	●	●	●	2013	2015
Prior Authorization	●	N/R	●		●		●		2013	
Claim Submission	●	●	●	●	●	●	●	●	2013	2015
Attachments	●	●	●		●		●		2014	2016
Acknowledgements	●	●							2017	2021
Coordination of Benefits	●	●	●	●	●	●			2015	2022
Claim Status Inquiry	●	●	●	●	●	●	●	●	2013	2015
Claim Payment	●	●	●	●	●	●	●	●	2013	2015
Remittance Advice	●	●	●	●	●	●	●	●	2013	2016

N/R = No Benchmark Reported (Insufficient Data)

Adoption Rate

Adoption rates are calculated using only medical and dental plan reported volumes. Transaction adoption is classified into three modes:

Fully Electronic — Administrative transactions conducted using a HIPAA-mandated standard, unless otherwise specified.

Partially Electronic — Administrative transactions conducted using web portals and interactive voice response (IVR) systems.

Fully Manual (Manual) — Administrative transactions requiring end-to-end human interaction such as telephone, mail, fax, and email.

For the figures depicting the medical and dental plan adoption rates, adoption rates were calculated by mode as a proportion of the total volume reported by plans and represent the percent distribution of transactions conducted by mode.

Adoption Rate (per mode) = Volume Reported by Plans (per mode) / Total Volume Reported by Plans

The annual percentage point change is computed as the arithmetic difference between percentages.

Provider Weights

Medical and dental provider results are weighted to provide representative estimates of the medical and dental provider populations.

For medical providers, results are estimated based on the size and type of practice as well as specialty of the responding provider. The groups were defined using the American Medical Association (AMA) Benchmark Practice Survey⁴⁰ and the AAMC Physician Specialty Data Report⁴¹. The distribution of providers in the population was determined using active and self-attested MD/DO information contained within CAQH’s Provider Data Portal.⁴² Size and type of practice included: Less than 5 physicians, 5-50+ physicians, and hospitals. Specialty groups included: Generalist, Specialist, Behavioralist, and Hospitalist.

For dental providers, results are estimated based on the provider’s practice size and Dental Support Organization (DSO) affiliation status. The distribution of providers in the population was determined using the American Dental Association (ADA) Survey of Dental Practice.⁴³ The distribution of dental providers were split into three groups: non-DSO affiliated solo practice, DSO affiliated solo or group practice, and non-DSO affiliated group practice.

The following table shows the percent of the medical provider population represented in each group:

Specialty	Size	Percent
Generalist	1-4	26.9%
Generalist	5-50+	19.8%
Specialist	1-4	19.6%
Specialist	5-50+	18.1%
Behavioralist	1-4	3.2%
Behavioralist	5-50+	2.4%
Hospitalist*	Hospital	9.7%

* Refers to a hospital-based respondent.

The following table shows the percent of the dental provider population represented in each group:

Type of Entity	Percent
Non-DSO Affiliated Solo Practice	36%
DSO Affiliated Solo or Group Practice	13%
Non-DSO Affiliated Group Practice	51%
Total	100%

Provider weights were calculated by dividing the percent of the sample in each group by the percent of the population in each group as defined by the CAQH's Provider Data Portal and the ADA. Since not all providers submit data for every transaction, provider weights were calculated individually for each transaction.

Provider Weight (per transaction) = Percentage of the Sample in Each Group Reporting the Transaction / Percentage of the Population in Each Group

Estimated Volume

Plan Estimated Volume

The total transaction volume is estimated based on the proportion of covered lives represented by participating medical plans using the AIS Directory of Health Plans or reported enrollment for medical plans, whichever value was higher. For dental plans the plan reported enrollment was used for estimation. To determine the percent of covered lives represented, the total enrollment from the AIS Directory of Health Plans⁴⁴ was used for medical plans and the NADP Dental Health Plan Profiles⁴⁵ for dental plans. The extrapolated national volume for each transaction is calculated by mode as follows for both medical and dental plans:

Extrapolated Plan Volume (per modality) = Volume Reported by Plans / Percent of Covered Lives Represented by CAQH Data Contributors

Provider Estimated Volume

Provider volume is calculated first by determining the percentage of each transaction that was conducted by mode (electronic, partial, or manual) for each provider.

Provider Mode Distribution (per transaction) = Provider Reported Volume for Mode (per transaction) * Provider Reported Volume for All Modes (per transaction)

The provider specific mode distribution was then averaged among providers and weighted by the size and specialty groups listed above.

Average Provider Mode Distribution (per transaction) = Average (Provider Weight (per transaction) * Provider Modality Percentage (per transaction))

To account for small provider cell sizes for some transactions by mode, the plan adoption rate per mode is averaged with the weighted average provider mode distribution. This generates a single estimated percentage by modality for each transaction.

Provider Distribution (per mode per transaction) = Average (Plan Adoption Rate (per mode per transaction) * Average Provider Modality Percentage (per transaction))

Given that each transaction for a plan also occurs for a provider, the national estimated plan volume (by mode) is assumed to be same value as the national estimated provider volume (by mode). To determine the provider volume for each mode, the average provider distribution is multiplied by the national estimated provider volume.

Extrapolated Provider Volume (per modality) = Total Plan Estimated Volume for a Given Transaction * Average Modality Percentage

The industry estimated volume for each transaction is the sum of the plan estimated volume and the provider estimated volume for each mode.

Cost Per Transaction

Transaction costs are reported for fully electronic, partially electronic and manual transactions for medical and dental plans and providers when available depending on sample size. For medical and dental plans, the cost per transaction by mode is a weighted average based on the data submitted by participants reporting a valid result using the proportion of their membership enrollment. The calculation requires both the reporting of a valid transaction volume and transaction cost by a survey participant to be included in the weighted average cost.

For medical and dental providers, weighted average costs per transaction by mode were calculated by NORC based on transaction type, average staff time to conduct a transaction and cost per transaction for each mode. The cost calculation followed a multi-step process to calculate weighted costs per transaction for medical and dental providers:

- The time per transaction by mode and reported salary were averaged using the provider weights stated above, which account for both size and specialization of practice.

Time per Transaction (per mode) = Average (Provider Weight (per transaction) * Provider Reported Time per Transaction (per Mode, in minutes))

Average Salary = Average (Provider Weight (per transaction) * Provider Reported Salary)

- The average loaded salary per minute per mode for each provider was created by multiplying the average salary by a specific loading factor to account for benefit and overhead costs and then dividing that number by minutes in a work year (40 hours/week, 52 weeks/year, or 124800 minutes).

Loaded Average Salary (per mode per provider, in minutes) = Average Salary * Loading Factor / Minutes in Work Year

- The individual provider loaded cost per transaction per mode was calculated by multiplying the average loaded salary per minute for each responding provider with the average time per transaction by mode among all providers.

Loaded cost (per provider per transaction per mode) = Loaded Average Salary per minute (per mode per provider) * Time per Transaction (per mode, in minutes)

- The average cost per transaction was calculated using the individual provider loaded cost per transaction per mode and the provider weights stated above.

Cost per Transaction (per modality) = Average (Loaded cost (per provider per transaction per mode) * Provider Reported Time per Transaction (per Mode))

Estimated Medical and Dental Spend, Cost Savings Opportunity and Cost Avoided, 2024 CAQH Index (in millions)

	Manual Spend*	Estimated Spend	Cost Savings Opportunity	Electronic Spend	Cost Avoided
MEDICAL					
Eligibility and Benefit Verification	\$ 204,105	\$ 43,896	\$ 11,744	\$ 32,152	\$ 160,209
Prior Authorization	\$ 2,223	\$ 1,257	\$ 515	\$ 742	\$ 966
Claim Submission	\$ 38,301	\$ 18,901	\$ 2,486	\$ 16,415	\$ 19,400
Attachments	\$ 448	\$ 402	\$ 71	\$ 331	\$ 46
Coordination of Benefits	\$ 227	\$ 43	\$ 20	\$ 23	\$ 184
Claim Status Inquiry	\$ 39,978	\$ 10,492	\$ 2,400	\$ 8,092	\$ 29,486
Claim Payment	\$ 4,791	\$ 3,225	\$ 449	\$ 2,777	\$ 1,565
Remittance Advice	\$ 8,350	\$ 4,749	\$ 695	\$ 4,054	\$ 3,601
Total	\$ 298,423	\$ 82,965	\$ 18,380	\$ 64,586	\$ 215,457
DENTAL					
Eligibility and Benefit Verification	\$ 5,803	\$ 2,102	\$ 580	\$ 1,522	\$ 3,701
Claim Submission	\$ 2,011	\$ 1,470	\$ 124	\$ 1,346	\$ 541
Coordination of Benefit	\$ 10	\$ 4	\$ 3	\$ 1	\$ 6
Claim Status Inquiry	\$ 1,734	\$ 846	\$ 421	\$ 425	\$ 888
Claim Payment	\$ 1,344	\$ 1,093	\$ 379	\$ 714	\$ 251
Remittance Advice	\$ 1,862	\$ 1,429	\$ 599	\$ 830	\$ 433
Total	\$ 12,764	\$ 6,944	\$ 2,106	\$ 4,838	\$ 5,820
MEDICAL AND DENTAL INDUSTRY					
Total	\$ 311,187	\$ 89,909	\$ 20,486	\$ 69,424	\$ 221,277

*Spend if all transactions were conducted manually.

Estimated Spend, Cost Avoided and Cost Savings Opportunity

Estimated Spend

Estimated spend is calculated by multiplying the estimated volume per mode by its respective weighted cost per transaction for medical and dental plans and providers within a transaction. The total spend per transaction is equal to the sum of spend for each mode per transaction.

Estimated Cost Avoided

The estimated cost avoided is the arithmetic difference between the spend if all transactions were conducted manually and the total estimated spend by transaction. The total manual spend per transaction was computed by multiplying the estimated national volume of all modes by the manual cost per transaction.

Estimated Cost Savings Opportunity

The cost savings opportunity for switching from manual to fully electronic transactions is calculated by multiplying the estimated national volume of manual transactions by the cost per transaction difference between fully electronic and manual transactions for each transaction. The cost savings opportunity for switching from partially electronic to fully electronic transactions is calculated by multiplying the estimated national volume of partially electronic transactions by the cost per transaction difference between the fully electronic and partially electronic transactions for each transaction.

Time Savings Opportunity

The time savings opportunity per transaction was estimated using the arithmetic difference between the weighted average time for providers to conduct either a manual or partially electronic transaction and a fully electronic transaction.

Average, Minimum and Maximum Provider Time Spent Conducting Transactions, Medical 2024 CAQH Index

Transaction	Mode	Average Time Providers Spend per Transaction (minutes)	Min Time Providers Spend per Transaction (minutes)	Max Time Providers Spend per Transaction (minutes)	Average Time Savings Opportunity (minutes)
Eligibility and Benefit Verification	Manual	16	4	35	12
	Partial	8	<1	20	4
	Electronic	4	<1	11	
Prior Authorization	Manual	24	2	60	14
	Partial	16	1	39	6
	Electronic	10	<1	30	
Claim Submission	Manual	12	<1	30	7
	Electronic	5	<1	15	
Attachments	Manual	11	<1	30	4
	Electronic	7	<1	20	
Acknowledgements	Manual	12	<1	42	8
	Partial	9	<1	31	5
	Electronic	4	<1	10	
Claim Status Inquiry	Manual	25	1	60	18
	Partial	10	<1	25	3
	Electronic	7	<1	21	
Claim Payment	Manual	8	<1	20	3
	Electronic	5	<1	20	
Remittance Advice	Manual	9	1	25	4
	Partial	8	<1	19	3
	Electronic	5	<1	15	
Total Time Savings Opportunity (Manual)					70
Total Time Savings Opportunity (Partial)					21

Average, Minimum and Maximum Provider Time Spent Conducting Transactions, Dental 2024 CAQH Index

Transaction	Mode	Average Time Providers Spend per Transaction (minutes)	Min Time Providers Spend per Transaction (minutes)	Max Time Providers Spend per Transaction (minutes)	Average Time Savings Opportunity (minutes)
Eligibility and Benefit Verification	Manual	12	<1	29	8
	Partial	7	<1	15	3
	Electronic	4	1	11	
Claim Submission	Manual	6	<1	18	2
	Electronic	4	<1	10	
Acknowledgements	Electronic	8	<1	19	5
	Manual	4	<1	11	1
	Electronic	3	<1	10	
Claim Status Inquiry	Manual	18	1	45	12
	Partial	7	1	20	1
	Electronic	6	<1	20	
Claim Payment	Manual	4	1	10	1
	Electronic	3	<1	10	
Remittance Advice	Manual	6	<1	15	3
	Partial	5	<1	11	2
	Electronic	3	<1	7	
Total Time Savings Opportunity (Manual)					31
Total Time Savings Opportunity (Partial)					7

Provider Interview Themes

The interviews provided deeper and specific insights into the survey, allowing for a more nuanced understanding of the individual dynamics which shaped the data collected by the surveys. However, the interviews are not necessarily reflective of all providers or their processes. Their insights clarify and support the meaning of some trends in the data, but do not supplant broader national estimates and findings.

Several distinct themes emerged through the qualitative follow-up interviews, including the following:

- Many providers see automation and web portals as the default for certain tasks.
 - Providers establishing new practices are frequently including automation and outsourcing.
- More established and older providers dislike automated systems.
 - Automation can be expensive and lack the human touch necessary to handle disputes with insurance.
- For providers who conduct manual transactions, most prefer to communicate with health plans over the phone.
- Behavioralists and specialists take longer to conduct basic transactions, due to the more complex nature of their services.
 - Behavioralist benefits are often poorly clarified/documented and may require more interaction with health plans to understand and confirm.
 - Specialists often face issues from insurance company's doctors who are reviewing documents and may not be familiar with the specialty or services.
- Staffing is harder than it was before COVID-19, although smaller practices are having fewer issues staffing in 2024.

Considerations

Some over-counting and under-counting of transaction volume may occur:

- Some transactions may be reported as fully electronic transactions even if they were initially sent as a manual transaction and then converted to a fully electronic transaction by a practice management system. No direct relationships between or among the volumes of transactions should be inferred.
- Some eligibility and benefit verification transactions may never result in a claim submission or claim payment since some practice management systems make periodic eligibility and benefit verification requests that are not connected to patient encounters.
- Some claim submission transactions may not be requests for payment since only a few plans can distinguish claim submissions that are requests for payment from encounter reports versus claim submissions that are only transmissions of medical service information, such as for value-based payments and capitation arrangements.
- Some transactions may not result in a claim payment transaction if there is no payment due from the health plan after adjudication, such as when a patient is meeting the annual deductible.
- Due to availability of data and the ability to report data in the required format, health plan and providers may be unable to report values for all modes. Blank cells may not indicate that a mode is not used to complete a transaction but rather that data is not available.

The results of this report are based on surveys and may be subject to response bias.

The CAQH Index uniquely tracks only direct costs:

- Costs reported include the labor time required to conduct the transaction, not the time and cost associated with gathering information for the transaction and follow-up. System costs are excluded from the cost and savings estimates.
- Sample variation may impact some transaction cost trends from year to year.
- Medical and dental provider costs to conduct a transaction reflect only a snapshot in time for the specific group of providers. Sampling factors such as salary increases or declines, learning curve for a new employee to process a transaction and the mix of specialty type may impact the trending of data.
- The ability to report on all transactions exchanged is dependent on accurate reporting practices used by health plans and providers. Due to employment changes and increases in utilization after the pandemic emergency, some health plans and providers may have had new staff gathering and submitting data, increasing data variability.
- The cost calculation methodology calculates each step (salary, time, and unit cost) as separate results on average based on the provider distribution by size and specialty. This is designed to create a modular and replicable process for cost calculation that can be useful to the industry. However, this assumes that the time and unit cost are independent of each other at the provider level. If results were explicitly calculated at the provider group or respondent level, there may be some slight variation in the overall outcome.

The image features a dark blue background with a network diagram of white nodes and lines. The nodes are represented by small circles, and the lines are thin, connecting the nodes in a complex, web-like structure. The diagram is positioned at the top and bottom of the page, framing the central text.

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2024 CAQH Index Advisory Council Roster

2024 CAQH Index Advisory Council Member	Organization
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Terrence Cunningham	American Hospital Association (AHA)
Tom Mort	Vyne Dental
Viet Nguyen	HL7



Endnotes



Overview

- ¹ CMS Releases 2023-2032 National Health Expenditure Projections | [CMS](#).
- ² Concern grows around US health-care workforce shortage: 'We don't have enough doctors' | [CNN](#).
- ³ Doctor Practices, Some Losing \$250,000 A Year, Reel From Labor Costs | [Forbes](#).
- ⁴ Fact Sheet: End of the COVID-19 Public Health Emergency | [HHS.gov](#).
- ⁵ Ransomware_Attacks_Surge_in_2023.pdf | [DNI.gov](#).
- ⁶ What to expect in US healthcare in 2024 and beyond | [McKinsey](#).
- ⁷ Providers Are Accelerating Investments In Technology To Gain Operational Efficiencies In Areas Such As Revenue Capture, Procurement And Claims Processing – In Light Of Narrowing Margins Over The Past Two Years | [Healthcare Business Today](#).
- ⁸ Big Opportunities to Reduce Costs and Increase Efficiency in Healthcare Operations | [HIMSS](#).

Key Findings

- ⁹ American Health Care Faces a Staffing Crisis | [TIME](#).
- ¹⁰ Are Staffing Shortages A New Problem, Or A Recurring Crisis? | [Forbes](#).
- ¹¹ Fact Sheet: End of the COVID-19 Public Health Emergency | [HHS.gov](#).
- ¹² Are Staffing Shortages A New Problem, Or A Recurring Crisis? | [Forbes](#).
- ¹³ Navigating the Crisis: Strategies for Addressing Healthcare Staffing Shortages - AJHCS | [Forbes](#).
- ¹⁴ Healthcare and revenue cycle trends for 2023 and beyond | [Access healthcare](#).
- ¹⁵ Security Breaches in Healthcare in 2023 | [Hippa Journal](#).
- ¹⁶ New analysis points to troubling trends as U.S. healthcare costs rise, but health outcomes worsen | [Fierce Healthcare](#).
- ¹⁷ Easing administrative burdens: Staffing and burnout challenges | [Tech Target](#).
- ¹⁸ Health Worker Burnout | [HSS.gov](#).
- ¹⁹ HIMSSCast: Physicians feel the pressure of doing more with less | [Healthcare Finance News](#).

Detailed Administrative Workflow

- ²⁰ CAQH CORE – Committee on Operating Rules for Information Exchange (Accessed on November 18, 2024) | [CAQH](#).
- ²¹ What doctors wish patients knew about prior authorization | [American Medical Association](#).
- ²² Interoperability and Prior Authorization Final Rule (CMS-0057-F), Federal Register: Medicare and Medicaid Programs; Patient Protection and Affordable Care Act; Advancing Interoperability and Improving Prior Authorization Processes for Medicare Advantage Organizations, Medicaid Managed Care Plans, State Medicaid Agencies, Children's Health Insurance Program (CHIP) Agencies and CHIP Managed Care Entities, Issuers of Qualified Health Plans on the Federally-Facilitated Exchanges, Merit-Based Incentive Payment System (MIPS) Eligible Clinicians, and Eligible Hospitals and Critical Access Hospitals in the Medicare Promoting Interoperability Program | [Federal Register](#).
- ²³ Physicians sounding the alarm on prior authorization: 9 things to know | [Beckers Physician Leadership](#).

- ²⁴ AMA survey indicates prior authorization wreaks havoc on patient care | [American Medical Association](#).
- ²⁵ CMS finalizes rule tightening prior authorization turnaround for insurers | [Healthcare Dive](#).
- ²⁶ [2023 MGMA Regulatory Burden Report FINAL](#).
- ²⁷ <https://www.federalregister.gov/documents/2024/02/08/2024-00895/medicare-and-medicaid-programs-patient-protection-and-affordable-care-act-advancing-interoperability>.
- ²⁸ The Optum 2024 Revenue Cycle Denials Index | [Business Optum](#).
- ²⁹ Battle of the Bots: As payers use AI to drive denials higher, providers fight back | [HFMA](#).
- ³⁰ What is Coordination of Benefits & How Does it Work? | [eHealth](#).
- ³¹ Unemployment rate inches up during 2023, labor force participation rises: Monthly Labor Review: U.S. Bureau of Labor Statistics | [U.S. Bureau of Labor Statistics](#).
- ³² [NACHA_HC_Fact_Sheet.pdf](#).
- ³³ How electronic funds transfer can benefit your dental practice | [American Dental Association](#).
- ³⁴ Switching to EFTs Saves Dental Practices Time and Money | [Nacha](#).
- ³⁵ Healthcare EFT Payments Soared in the Last Decade | [Nacha](#).

Methodology & Transaction Definitions

- ³⁶ AIS Health Data, a Division of Managed Markets Insight and Technology, LLC, AIS's Directory of Health plans: 2023, (2024).
- ³⁷ National Association of Dental Health Plans, Dental Benefits Report, 2022.
- ³⁸ NORC at the University of Chicago is an independent research institution that delivers insights and data analysis for government, nonprofits, and businesses | [NORC.org](#).
- ³⁹ Federal Register: Medicare and Medicaid Programs; Patient Protection and Affordable Care Act; Advancing Interoperability and Improving Prior Authorization Processes for Medicare Advantage Organizations, Medicaid Managed Care Plans, State Medicaid Agencies, Children's Health Insurance Program (CHIP) Agencies and CHIP Managed Care Entities, Issuers of Qualified Health Plans on the Federally-Facilitated Exchanges, Merit-Based Incentive Payment System (MIPS) Eligible Clinicians, and Eligible Hospitals and Critical Access Hospitals in the Medicare Promoting Interoperability Program | [Federal Register](#).
- ⁴⁰ "Physician Practice Benchmark Survey". AMA (2022) | [ama.org](#).
- ⁴¹ "Physician Specialty Data Report". AAMC (2021) | [aamc.org](#).
- ⁴² "Provider Data" | [CAQH](#).
- ⁴³ "Distribution of dentists according to size of dental practice and affiliation with a dental support organization (DSO) (XLSX)" ADA. (May 2023) | [ada.org](#).
- ⁴⁴ AIS Health Data, a Division of Managed Markets Insight and Technology, LLC, AIS's Directory of Health plans: 2023, (2024).
- ⁴⁵ National Association of Dental Health Plans, Dental Benefits Report, 2022.



CAQH Insights identifies opportunities to streamline business practices and measure the impact of a more automated healthcare workflow through industry research and partnerships.

Participate in the CAQH Index

We invite medical and dental plans, healthcare providers and vendors to contribute to the CAQH Index. Data collection begins Summer 2025. For more information and to participate, please email insights@caqh.org.

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