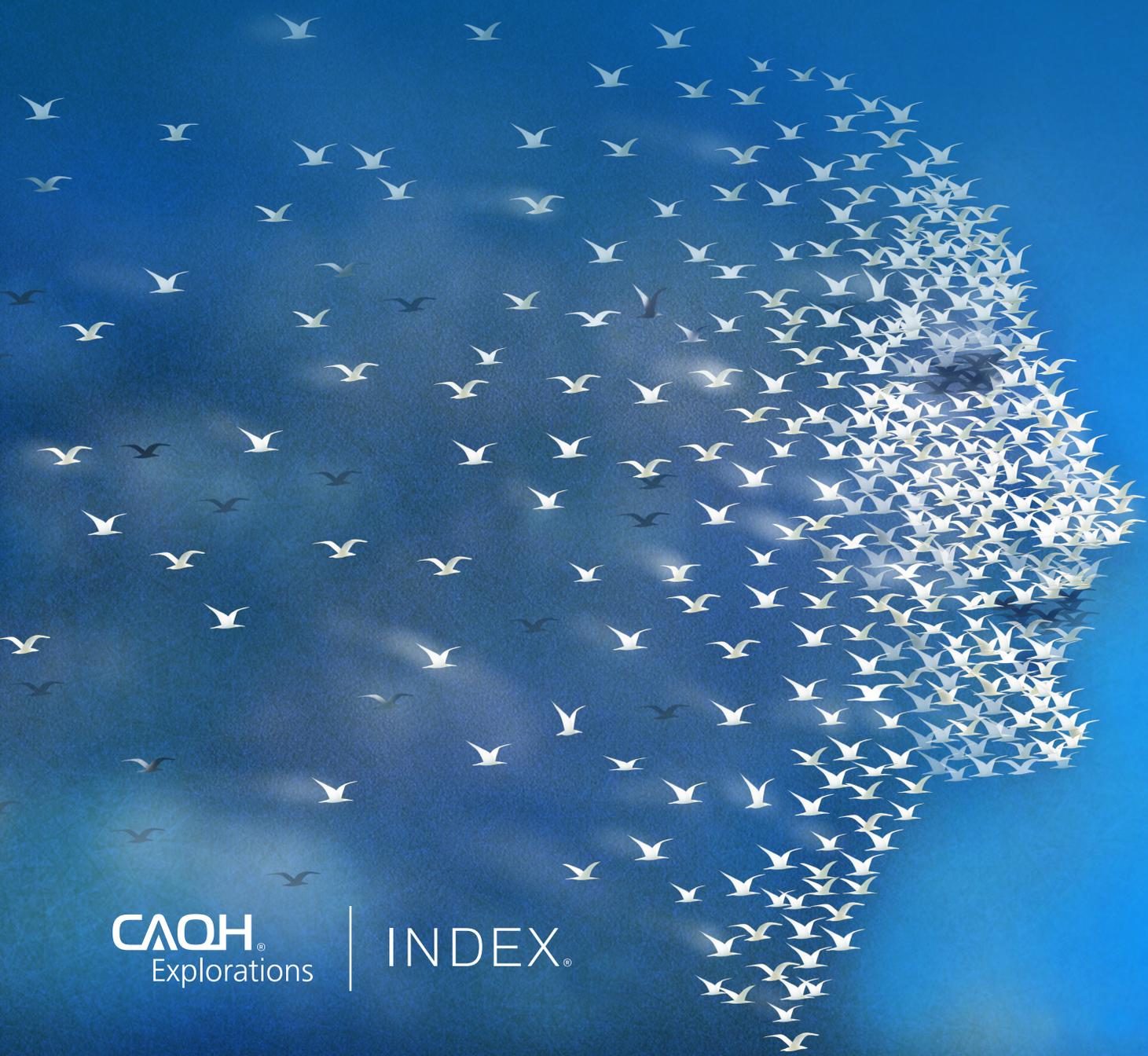


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# 2021 CAQH INDEX<sup>®</sup>

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Working Together:  
Advances in Automation During  
Unprecedented Times



CAQH<sup>®</sup>  
Explorations

INDEX<sup>®</sup>

# 2021 CAQH INDEX

Working Together:  
Advances in Automation During Unprecedented Times

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CAQH, a non-profit alliance, is the leader in creating shared initiatives to streamline the business of healthcare. Through collaboration and innovation, CAQH accelerates the transformation of business processes, delivering value to providers, patients and health plans.

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# Overview

**While the coronavirus (COVID-19) surged through the U.S. during 2020 straining health systems,<sup>1,2</sup> health plans and providers worked together to conduct administrative functions related to millions of business transactions, many from home offices. Data from the 2021 CAQH Index found that, of the \$391 billion spent on administrative complexity in the United States healthcare system,<sup>3</sup> \$42 billion, or 11 percent, is spent conducting administrative transactions tracked by the CAQH Index. Of the \$42 billion, the industry can save \$20 billion, or 48 percent of existing annual spend, by transitioning to fully electronic transactions. While the industry has already avoided \$166 billion annually by automating administrative transactions, total spend continues to rise and opportunities to reduce costs exist.**

This annual report, the ninth produced by CAQH, measures national progress in reducing the costs associated with conducting administrative transactions in the healthcare industry for medical and dental plans and providers. The CAQH Index tracks the adoption of Health Insurance Portability and Accountability Act (HIPAA) mandated transactions, as well as other administrative transactions related to verifying insurance coverage, obtaining authorization for care, submitting a claim, attaching supplemental information and sending and receiving payments. The report this year is unique as it measures adoption, volume and cost savings during a national pandemic — COVID-19 — an unprecedented event that significantly impacted the healthcare industry and its administrative functions.

- 1 “The Impact of the COVID-19 Pandemic on Outpatient Visits: A Rebound Emerges,” The Commonwealth Fund, May 19 2020, <https://www.commonwealthfund.org/publications/2020/apr/impact-covid-19-outpatient-visits>.
- 2 George Miller, Corwin Rhyan, Ani Turner, Katherine Hempstead, “COVID-19 Shocks The US Health Sector: A Review Of Early Economic Impacts,” Health Affairs Blog, December 16, 2020, <https://www.healthaffairs.org/doi/10.1377/hblog20201214.543463/full/>.
- 3 “Projected,” Health Expenditure Data, Centers for Medicare & Medicaid Services Website, last modified December 1, 2021, <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NationalHealthAccountsProjected>. Healthcare administrative complexities include all national health expenditures (NHE), less investment (research, structures and equipment) and public health outlays by federal and state governments.

# Transactions

The 2021 CAQH Index collected data on the following nine administrative transactions.

<p><b>Eligibility and Benefit Verification</b></p>	<p><b>Prior Authorization</b></p>	<p><b>Claim Submission</b></p>	<p><b>Attachments</b></p>	<p><b>Acknowledgements</b></p>
<p>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.</p>	<p>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.</p>	<p>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.</p>	<p>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.</p>	<p>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.</p>
<p><b>Coordination of Benefits</b></p>	<p><b>Claim Status Inquiry</b></p>	<p><b>Claim Payment</b></p>	<p><b>Remittance Advice</b></p>	
<p>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.</p>	<p>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.</p>	<p>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+).</p>	<p>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.</p>	

## Key Terms and Financial Metrics

Below are the primary metrics reported for each transaction in the 2021 CAQH Index report. Adoption rates are calculated using only medical and dental plan reported volumes.

KEY TERMS				
<p><b>Adoption</b></p>	<p><b>Estimated Volume</b></p>	<p><b>Fully Electronic</b></p>	<p><b>Partially Electronic</b></p>	<p><b>Fully Manual (Manual)</b></p>
<p>The degree to which medical and dental plans and providers complete transactions using fully electronic, partially electronic or manual modes.</p>	<p>The number of fully electronic, partially electronic and manual transactions reported by medical and dental plans and providers weighted to a national level.</p>	<p>Transactions conducted using a HIPAA-mandated standard, unless otherwise specified.</p>	<p>Transactions conducted using web portals and interactive voice response (IVR) systems.</p>	<p>Transactions requiring end-to-end human interaction such as telephone, mail, fax and email.</p>

## FINANCIAL METRICS

### 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).

### 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.

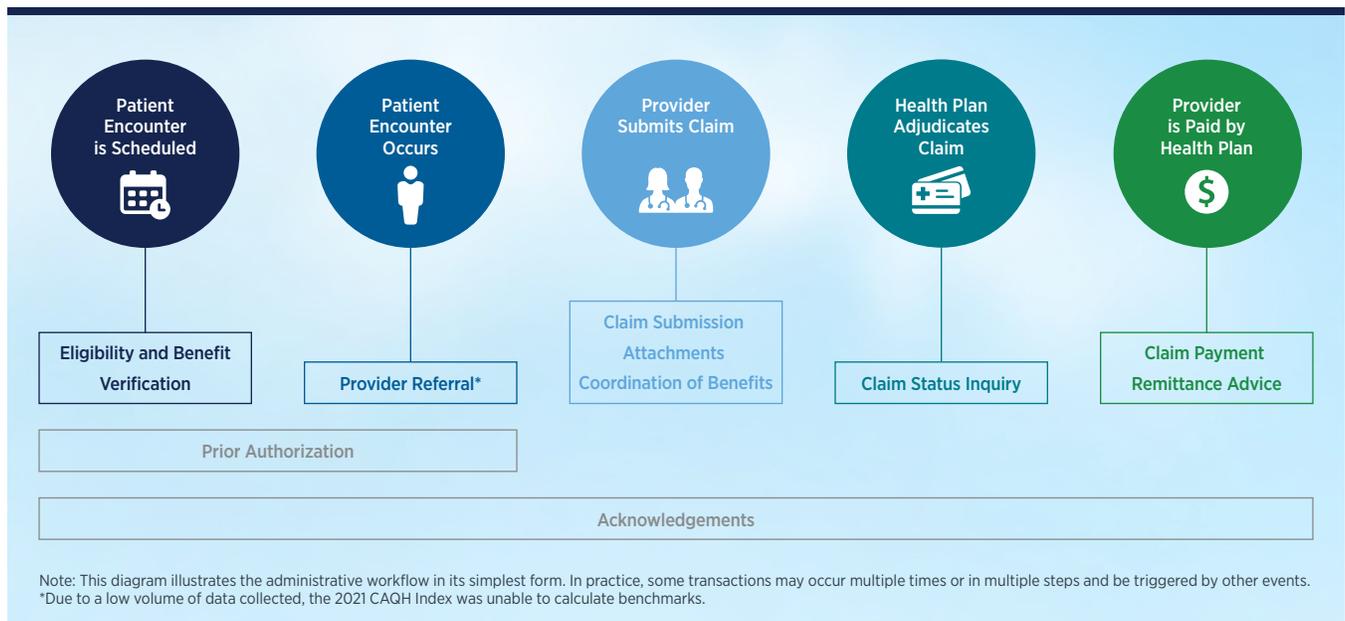
### Time Savings Opportunity

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.

## The Administrative Workflow

A medical or dental encounter with a provider encompasses a series of administrative tasks that begins with a patient scheduling a visit and ends with a payment for the healthcare services being provided. The CAQH Index collects detailed information from health plans and providers on how specific administrative transactions are conducted (modes studied include fully electronic, partially electronic and manual), how many are conducted (volume) and the cost and time to process each transaction.

By tracking automation, the industry can work together to identify inefficiency within the workflow and target areas for improvement with concerted efforts to reduce the cost and time associated with certain administrative tasks. Specific to this year, the CAQH Index delivers insights into the impact COVID-19 had on administrative transactions.



# KEY FINDINGS

In 2020, COVID-19 challenged the healthcare industry as the number of infected people increased and health plans and providers worked together to navigate stressed healthcare systems, evolving policies and changing social behaviors. Overall utilization and administrative transaction volume decreased in the early months of the pandemic due to social distancing and a temporary halt to non-emergency services.<sup>4,5,6</sup> These volume losses were somewhat offset by the rise in telemedicine services which allowed for virtual patient visits and follow-up appointments.

As telemedicine services expanded, new policies and requirements were implemented which introduced additional and varied administrative complexity to health plans and providers, often resulting in costly and time-consuming manual work that occurred outside the workflow. Dental plans and providers, while not as impacted by telemedicine policies and requirements due to the in-person nature of many dental services, struggled with office closures and financial losses as a result of lower utilization.<sup>7,8,9</sup> For many plans and provider administrative staff, COVID-19 forced the use of technology and automated transactions as staff began working from home and did not have access to office faxes, call centers and mail facilities.

While the healthcare industry continues to grapple with the impact of COVID-19 on utilization, transaction volume and workflows, the industry needs to continue to work together to identify gaps and opportunities in processes and systems. Reducing administrative burden while focusing on patient care in a post-COVID-19 era will require stakeholders to collaborate and together navigate new policies, requirements and norms.

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- 4 “Healthcare Utilization During a Pandemic: How COVID-19 Impacted Administrative Transactions,” CAQH, May 2021, <https://www.caqh.org/sites/default/files/covid-issue-brief.pdf>.
  - 5 Cynthia Cox, Rabah Kamal, Daniel McDermott, “How Have Health Care Utilization and Spending Changed So Far During the Coronavirus Pandemic?” Kaiser Family Foundation, March 23, 2021, <https://www.kff.org/coronavirus-covid-19/issue-brief/how-havehealthcare-utilization-and-spending-changed-so-far-during-thecoronavirus-pandemic/>.
  - 6 “Social Distancing,” Centers for Disease Control and Prevention, November 17, 2020, <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/social-distancing>.
  - 7 Fazal Ghani, “Covid-19 Outbreak — Immediate and long-term impacts on the dental profession,” Pakistan Journal of Medical Sciences, May 2020, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7306954/>.
  - 8 “COVID-19: Economic Impact on Dental Practices Week of August 10 Results,” Health Policy Institute and American Dental Association, accessed November 18, 2021, <https://surveys.ada.org/reports/RC/public/YWRhc3VydmV5cy01ZjM0M2RjZjc5NDZkZTAwMGY1M2JkZjU0VjVfNWJlJWdFFU01ldmNDUIV0>.
  - 9 Kamyar Nasseh, Marko Vujicic, “Modeling the Impact of COVID-19 on U.S. Dental Spending — June 2020 Update,” Health Policy Institute and American Dental Association, June 2020, [https://www.ada.org/-/media/project/ada-organization/ada/ada-org/files/resources/research/hpi/hpibrief\\_0620\\_1.pdf?rev=a898955484c64f34b48c08df3794f0d&hash=56716D45E46E155CE5D571622F1903CB](https://www.ada.org/-/media/project/ada-organization/ada/ada-org/files/resources/research/hpi/hpibrief_0620_1.pdf?rev=a898955484c64f34b48c08df3794f0d&hash=56716D45E46E155CE5D571622F1903CB).

## KEY FINDINGS

# ADOPTION

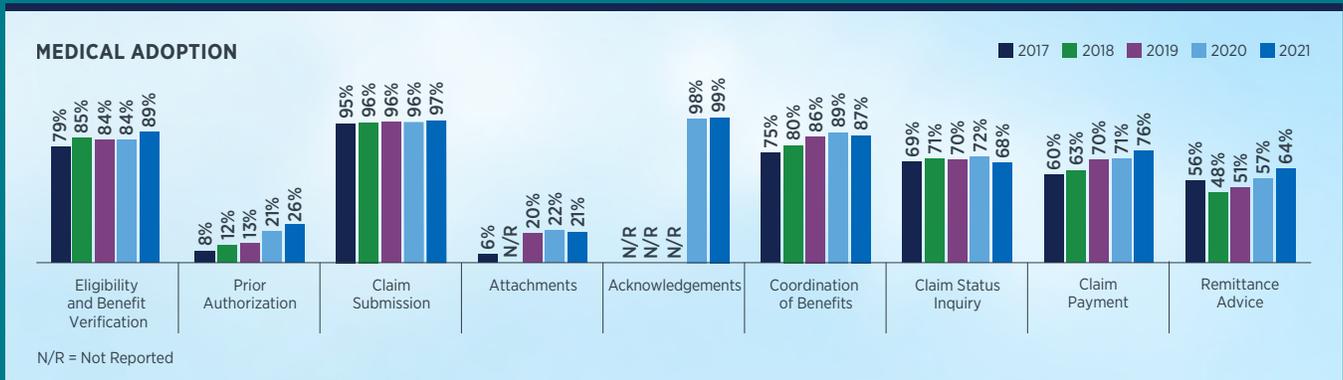
Adoption of electronic transactions improved for most **medical** transactions except attachments, coordination of benefits and claim status inquiry and improved for all **dental** transactions. As COVID-19 forced people to work from home and practice social distancing, health plan and provider staff did not have access to office fax machines and many health plan mail rooms and call centers were closed temporarily. Because of this, staff relied more on the use of electronic transactions to conduct administrative transactions.

# +2.3

percentage points

The average **increase** in adoption across the **medical** and **dental** industries.

### Medical Plan Adoption of Fully Electronic Administrative Transactions 2017-2021 CAQH Index



### Dental Plan Adoption of Fully Electronic Administrative Transactions 2017-2021 CAQH Index



## KEY FINDINGS

# VOLUME

Overall administrative transaction volume decreased during 2020. Both the **medical** and **dental** industries experienced **drops** in utilization as COVID-19 impacted healthcare policies, regulations, resources and social behaviors.

# -11%

**decrease** in overall  
**medical** transaction volume

# -3%

**decrease** in overall  
**dental** transaction volume

Despite the drop in overall transaction volume, the proportion of electronic volume continues to increase and accounts for the highest percentage of total volume for both the medical and dental industries, at 81 percent and 48 percent respectively.

### Medical and Dental Industry Estimated National Volume 2013-2021 CAQH Index (in billions)



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

## KEY FINDINGS

# SPEND

Despite the decrease in overall medical transaction volume and growth in electronic adoption, total annual **medical** spend **increased** (12%) as manual transactions required more intensive intervention from providers to ensure that newly implemented requirements and codes were executed correctly, and that patient medical records were current and accurate. Conversely, **dental** spending **decreased** due to lower utilization often resulting in office closures.

**+12% to**  
**\$37.4B**

The amount **medical** spending **increased**

**-23% to**  
**\$4.4B**

The amount **dental** spending **decreased**

### Medical and Dental Industry Estimated National Spend 2013-2021 CAQH Index (in billions)



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

## KEY FINDINGS

# COST SAVINGS OPPORTUNITIES

The cost savings opportunity for the **medical** industry **increased** (32%) due to higher costs for manual transactions and lower costs for electronic transactions — the **gap** between electronic costs and manual costs per transaction continues to increase. For the second year in a row, the cost savings opportunity **declined** (13%) for the **dental** industry as adoption increased.

The **medical** industry cost savings opportunity **increased to**  
**\$17.6B**

The **dental** cost savings opportunity **decreased to**  
**\$2.6B**

**Medical and Dental Industry Estimated National Cost Savings Opportunity 2013-2021 CAQH Index (in billions)**



**Medical Industry Average Cost per Transaction for Electronic and Manual Transactions 2013-2021 CAQH Index**



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

## KEY FINDINGS

# ADMINISTRATIVE WORKFLOW

While COVID-19 touched all healthcare professionals, the pandemic impacted the medical and dental administrative workflows differently.

### Automation

As remote work increased, many medical and dental staff became more reliant on the use of electronic transactions to conduct business. Staff no longer had access to resources used to conduct manual transactions. Because of this, both industries saw an increase in electronic adoption.

### Utilization

Policies developed by federal and state entities to curb the spread of COVID-19 resulted in lower utilization for both industries as people delayed, or went without, medical care.<sup>10</sup> In general, lower utilization led to lower transaction volumes. Smaller dental practices were hit particularly hard by lower utilization as many offices were forced to close for several months or close permanently.<sup>11</sup>

### Telemedicine

For the medical industry, the loss in volume was counterbalanced by the increase in telemedicine. Telemedicine expanded access to care while reducing exposure to the virus for staff and patients. Health plans and providers worked together to understand and confirm new requirements and varying codes around telemedicine which often resulted in costly and timely phone calls and manual work. And while manual volume dropped, manual transactions became more expensive, increasing overall spend and the cost savings opportunity.

### Spend

Although electronic adoption and volume increased for both industries, the spend associated with conducting administrative transactions varied. While the dental industry saw a drop in spend, the medical industry experienced an increase in spend as it dealt with more complicated factors related to COVID-19.

10 Cynthia Cox, Rabah Kamal, Daniel McDermott, "How Have Health Care Utilization and Spending Changed So Far During the Coronavirus Pandemic?" Kaiser Family Foundation, March 23, 2021, <https://www.kff.org/coronavirus-covid-19/issue-brief/how-havehealthcare-utilization-and-spending-changed-so-far-during-thecoronavirus-pandemic/>.

11 "COVID-19: Economic Impact on Dental Practices Week of August 10 Results," Health Policy Institute and American Dental Association, accessed November 18, 2021, <https://surveys.ada.org/reports/RC/public/YWRhc3VydMv5cy01ZjM0M2RjZjc5NDFkZTAwMGY1M2JkZjUtVVFjNWlJWDFFU01ldmNDUIV0>.

# Industry Call to Action

As the industry continues to understand how COVID-19 has affected the business of healthcare, support of new and evolving processes and policies is needed to help navigate changes and challenges the industry may face. During 2020, health plans and providers relied more on automated processes to conduct administrative transactions as offices were closed and many administrative staff were working from home. The pandemic also spurred an increase in telemedicine, which benefited patient and provider interactions but resulted in additional manual work for health plans and providers as they dealt with new, varied and changing codes and requirements.

Findings from this report indicate how electronic adoption, transaction volume, spend and cost savings opportunities were impacted by COVID-19 for the medical and dental industries. While both industries experienced a drop in transaction volume due to lower utilization, the impact on spend and cost savings opportunities varied by industry due to costs associated with conducting manual and electronic transactions. In order to expand on progress made in automation and respond to the current and changing needs and challenges related to telemedicine and interoperability, CAQH offers the following actions to the industry:

## Capitalize and Expand on Automation

During the pandemic, the healthcare industry automated more administrative tasks as health plans and providers dealt with social distancing regulations, modified office conditions and efforts to reduce administrative burden. For some, the cost to conduct electronic transactions decreased as use increased and processes became more efficient. While electronic costs decreased for many transactions, manual costs increased. Medical providers were challenged with establishing new workflows to address COVID-19 challenges and telemedicine resulting in costly and time-consuming manual tasks that fell outside of their current workflows.

To help reduce administrative burden and costs and expand on automation, use of electronic transactions should continue to be encouraged and promoted while considering how to integrate new processes into systems and workflows. Understanding how health plans and providers transitioned to more automated transactions during COVID-19, and the challenges and benefits associated with this, is needed to address pain points, update transactions and keep the momentum moving forward to continually increase the level of automation.

## Adapt Processes to Support Telemedicine

COVID-19 brought about a rise in telemedicine as providers and patients sought ways to safely access and obtain care<sup>12,13</sup> while minimizing transmission of the virus. Telemedicine, while experiencing challenges,<sup>14,15</sup> was viewed by providers and patients as a benefit during the peak of the pandemic that will likely continue into the future.<sup>16</sup>

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12 Lisa M. Koonin, Brooke Hoots, Clarisse A. Tsang, Zanie Leroy, Kevin Farris, Tilman Jollyend, Peter Antall, Bridget McCabe, Cynthia B.R. Zelis, Ian Tong, Aaron M. Harris, "Trends in the Use of Telehealth During the Emergence of the COVID-19 Pandemic — United States, January–March 2020," *Morbidity and Mortality Weekly Report*, Centers for Disease Control and Prevention, October 30, 2020, <https://www.cdc.gov/mmwr/volumes/69/wr/mm6943a3.htm>.

13 Eric Wicklund, "AMA Survey Charts Explosive Growth of Telehealth Services in 2020," *Telehealth News*, mHealth Intelligence, September 15, 2021, <https://mhealthintelligence.com/news/ama-survey-charts-explosive-growth-of-telehealth-services-in-2020>.

14 "Using Telehealth Services," COVID-19, Centers for Disease Control and Prevention, June 10, 2020, <https://www.cdc.gov/coronavirus/2019-ncov/hcp/telehealth.html>.

15 David Velasquez, Ateev Mehrotra, "Ensuring The Growth Of Telehealth During COVID-19 Does Not Exacerbate Disparities In Care," *Health Affairs*, May 8, 2020, <https://www.healthaffairs.org/doi/10.1377/hblog20200505.591306/full/>.

16 Oleg Bestsenyy, Greg Gilbert, Alex Harris, and Jennifer Rost, "Telehealth: A quarter-trillion-dollar post-COVID-19 reality?" *Healthcare Systems & Services*, McKinsey & Company, July 9, 2021, <https://www.mckinsey.com/industries/healthcare-systems-and-services/our-insights/telehealth-a-quarter-trillion-dollar-post-covid-19-reality>.

To date, federal and state regulations have been put in place to support and facilitate the use of telehealth.<sup>17,18,19</sup>

In alignment with industry efforts, CAQH CORE participants drafted operating rule requirements for eligibility and benefit verification (X12 270/271) that support service type codes related to telemedicine coverage and use. Including these details will help health plans and providers more readily identify which services or benefits are covered under telemedicine, helping reduce the time and effort spent on verifying this information.

In addition to developing regulations and operating rules around the use of telemedicine, health plans and providers should examine systems and procedures to ensure that secure infrastructure is in place to support existing and emerging requirements around the exchange of patient information. Staff should be made aware of policies and protocols for using telehealth services as they may impact patient encounters and administrative work surrounding the encounter. While the prevalence of telemedicine in future years is currently unknown, it has proven to be a useful and convenient tool for providers and patients in the delivery of care.

### **Ensure Interoperability Across Systems**

To help support the progress made on electronic adoption and the use of telehealth services, the industry needs to continue to promote interoperability across systems. Many government and industry initiatives are underway to update and create standards and operating rules to ensure that industry interoperability needs are met.<sup>20,21,22,23,24,25</sup>

Over the past year, CAQH CORE has led efforts to drive interoperability through new and updated operating rules. The updated CAQH CORE Connectivity Rule vC4.0.0 and the new Draft CAQH CORE Attachment Operating Rules serve as a bridge between clinical and administrative data by using a standard agnostic approach that supports interoperability between existing and emerging technology. This standard agnostic approach has the potential to accelerate interoperability by capitalizing on existing value built in backend systems, facilitating ease of technology transition and supporting smaller entities with fewer resources. Additionally, the updated Draft CAQH CORE Eligibility & Benefits Data Content Rule and updated Draft CAQH CORE Infrastructure Rules support emerging business needs.

As the industry transitions into a post COVID-19 era, cooperation and understanding are needed as health plans, providers and patients continue to work through and embrace new processes and workflows identified during the pandemic. While these processes and workflows may change as business needs emerge and new norms are established, it is important to maintain progress in automation and facilitate ease of transition. Through collaboration, stakeholders can identify best practices and solutions to streamline and transition business processes, enable a fully electronic administrative workflow and reduce administrative cost and burden. Moving forward, ongoing research is needed to determine any long-term effects COVID-19 has on the business of healthcare.

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- 17 "Telehealth: Delivering Care Safely During COVID-19," Coronavirus, U.S. Department of Health and Human Services, accessed November 29, 2021, <https://www.hhs.gov/coronavirus/telehealth/index.html>.
- 18 "COVID-19 State Policy Guidance on Telemedicine," Advocacy Resource Center, American Medical Association, accessed November 29, 2021, <https://www.ama-assn.org/system/files/2020-04/covid-19-state-policy-guidance-on-telemedicine.pdf>.
- 19 Maddie Mason, "Updates on Current Federal Telehealth Legislation," National Health Council, accessed November 29, 2021, <https://nationalhealthcouncil.org/blog/updates-on-current-federal-telehealth-legislation/>.
- 20 "21st Century Cures Act: Interoperability, Information Blocking, and the ONC Health IT Certification Program," National Archives, Federal Register, May 01, 2020, <https://www.federalregister.gov/documents/2020/05/01/2020-07419/21st-century-cures-act-interoperability-information-blocking-and-the-onc-health-it-certification>.
- 21 "Policies and Technology for Interoperability and Burden Reduction," Centers for Medicare & Medicaid Services, October 07, 2021, <https://www.cms.gov/Regulations-and-Guidance/Guidance/Interoperability/index#CMS-Interoperability-and-Patient-Access-Final-Rule>.
- 22 "Trusted Exchange Framework and Common Agreement (TEFCA)," HealthIT.gov, January 18, 2022, <https://www.healthit.gov/topic/interoperability/trusted-exchange-framework-and-common-agreement-tefca>.
- 23 "X12 Announces First Interoperability Crosswalks," X12, January 6, 2022, <https://x12.org/news-and-events/news/x12-announces-first-interoperability-crosswalks>.
- 24 "Strategic Initiatives," National Council for Prescription Drug Programs, accessed January 25, 2022, <https://www.ncpdp.org/Strategic-Initiatives.aspx>.
- 25 "Afinis Interoperability Standards," National Automated Clearing House Association, accessed January 25, 2022, <https://www.nacha.org/afinis-interoperability-standards>.

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TRANSACTION  
**FINDINGS**  
**2021**

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# 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

During the pandemic, electronic adoption increased for the majority of administrative transactions as health plans sought to further automate transaction processing to support staff working from home. Medical electronic adoption for eligibility and benefit verification transactions increased five percentage points. For the dental industry, electronic adoption increased seven percentage points for eligibility and benefit verification transactions — the highest increase of all dental transactions.

### 2 Volume Decreased

The overall volume of eligibility and benefit verification transactions decreased for both the medical and dental industries (18 percent and 5 percent, respectively) due to lower healthcare utilization during COVID-19.

### 3 Medical Spending Increased, Dental Decreased

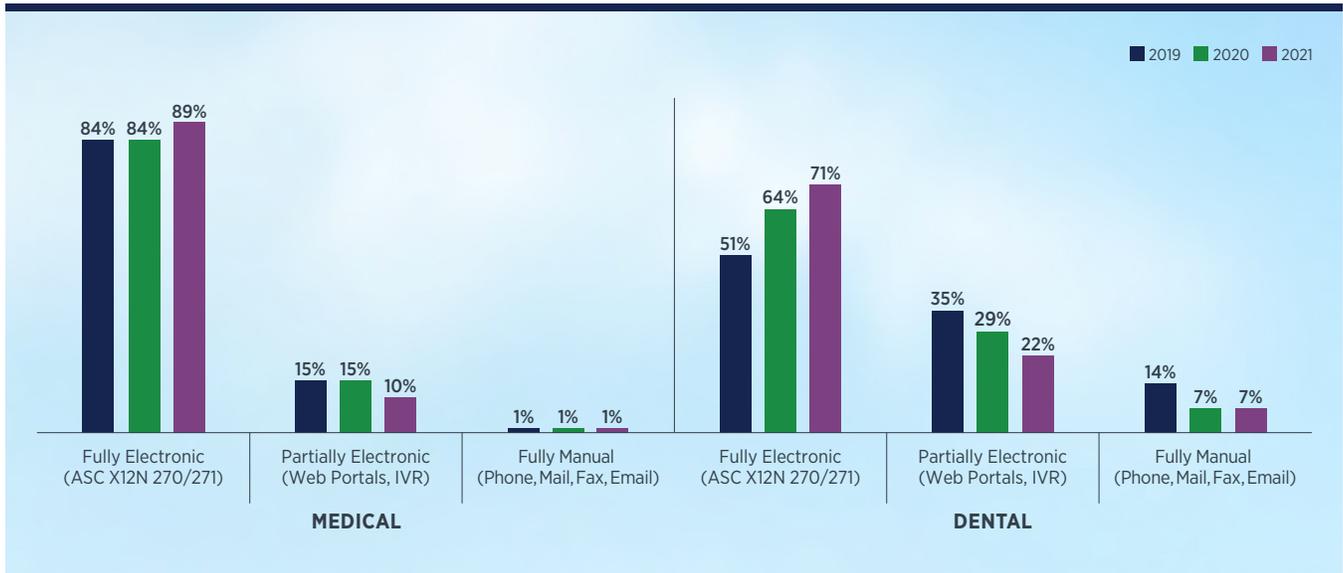
Despite the decrease in volume, spending associated with medical eligibility and benefit verification increased 16 percent and remains the highest among the transactions accounting for almost half (\$18.3 billion) of the total annual medical spend (\$37.4 billion). The increase in spending can be attributed to a significant increase in provider cost and time for manual eligibility and benefit verifications driven by the rise in telemedicine and complex COVID-19 cases. Dental spending on eligibility and benefit verifications declined as overall volume decreased and per transaction costs remained relatively stable.

### 4 Medical Cost Savings Opportunity Increased — Highest Opportunity

The medical cost savings opportunity increased 45 percent to \$9.8 billion. Variations in new codes and plan requirements associated with telemedicine and coverage changes due to job losses during COVID-19, prompted medical providers to place calls to health plans to discuss and verify varying, and sometimes complex, benefit situations, leading to an increase in manual costs. At the same time, the cost for electronic transactions declined, resulting in an increase in the cost savings opportunity between electronic and manual eligibility and benefit verification transactions.

ADOPTION

Medical and Dental Plan Adoption of Eligibility and Benefit Verification  
2019-2021 CAQH Index



VOLUME

Estimated National Volume of Eligibility and Benefit Verification by Mode  
2019-2021 CAQH Index (in millions)



**SPEND & SAVINGS**

**Eligibility and Benefit Verification: How Much is Spent and Saved With Full Adoption?  
2020-2021 CAQH Index (in millions)**



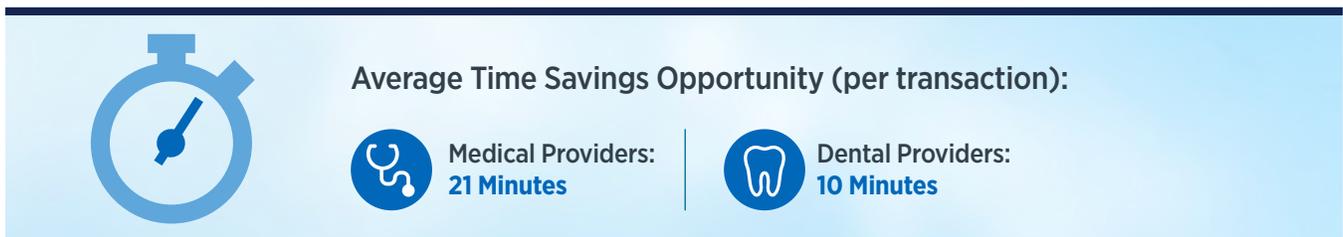
**COST SAVINGS OPPORTUNITY**

**Electronic Eligibility and Benefit Verification: Cost Savings Opportunity**



**TIME SAVINGS OPPORTUNITY**

**Electronic Eligibility and Benefit Verification: Time Savings Opportunity**



### Updates to the CAQH CORE Eligibility & Benefits (270/271) Data Content Rule to Address Emerging Industry Needs

In Spring 2021, CAQH CORE launched a Task Group to evaluate opportunity areas for operating rule enhancement for the existing CAQH CORE Eligibility & Benefits (270/271) Data Content Rule. The Task Group evaluated numerous opportunities and, after discussion and feedback among Task Group participants, drafted updated operating rule requirements for the following areas:

1. **Telemedicine:** Added requirements to address the emergent need to communicate telemedicine-specific eligibility and, benefit information.
2. **Service Type Codes:** Incorporated additional STC Codes beyond the current 52 CORE-required STC codes.
3. **Remaining Coverage Benefits:** Added requirements to support the communication of the number of remaining visits/services left on a benefit.
4. **Procedure Codes:** Added the ability to respond to eligibility and benefit requests at the procedure level (e.g., CPT, HCPCS).
5. **Prior Authorization/Certification:** Specified the ability to communicate if a prior authorization/certification is required for a specific procedure or service.
6. **Tiered Benefits:** Specified more granular level data for members of tiered benefit plans.

The updated rule is expected to progress through the CAQH CORE voting process and be available to the industry in Q1 2022.

For more information, visit: [www.caqh.org/core/eligibility-benefits-operating-rules](http://www.caqh.org/core/eligibility-benefits-operating-rules).

# 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

### 1 Adoption Increased, Spending Decreased

Automation of prior authorization increased from 21 to 26 percent. Due to the decrease in overall volume and increase in automation, spending associated with conducting prior authorizations decreased 11 percent to \$686 million. However, the cost savings opportunity associated with switching to electronic prior authorizations increased slightly as manual costs increased and electronic costs decreased for medical plans and providers.

### 2 Volume Decreased

Often cited by providers as a major source of administrative burden,<sup>26,27</sup> prior authorization has been one of the most costly and time-consuming transactions to conduct among those studied. To help reduce administrative burden on strained staff and to provide timelier patient care during the early months of the pandemic, requirements around prior authorization were suspended or waived.<sup>28</sup> These suspensions and waivers, along with reductions in medical services and freezes on elective procedures, resulted in a 23 percent decrease in prior authorization volume.

### 3 Time Savings Opportunity

The increase in automation resulted in time savings for medical providers. Providers saved, on average, 16 minutes by conducting a prior authorization using the HIPAA mandated standard as opposed to manually.

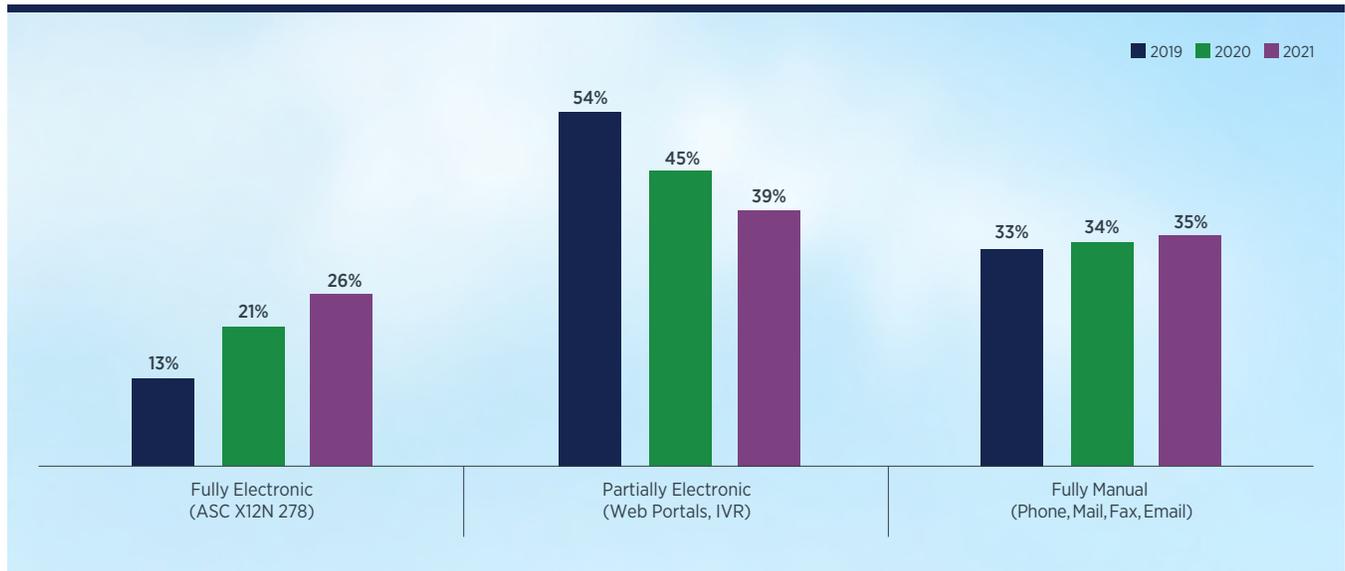
26 Claire Ernst, "Prior authorization burdens for healthcare providers still growing during COVID-19 pandemic," Medical Group Management Association, May 19, 2021, <https://www.mgma.com/data/data-stories/prior-authorization-burdens-for-healthcare-provide>.

27 YiDing Yu MD, "Transforming the prior authorization process to improve patient care and the financial bottom line," Medical Group Management Association, accessed November 17, 2021, <https://www.mgma.com/resources/revenue-cycle/transforming-the-prior-authorization-process-to-im>.

28 "Prior Authorization (PA) Policy changes Related to COVID-19," American Medical Association, February 5, 2021, <https://www.ama-assn.org/system/files/2021-01/prior-auth-policy-covid-19.pdf>.

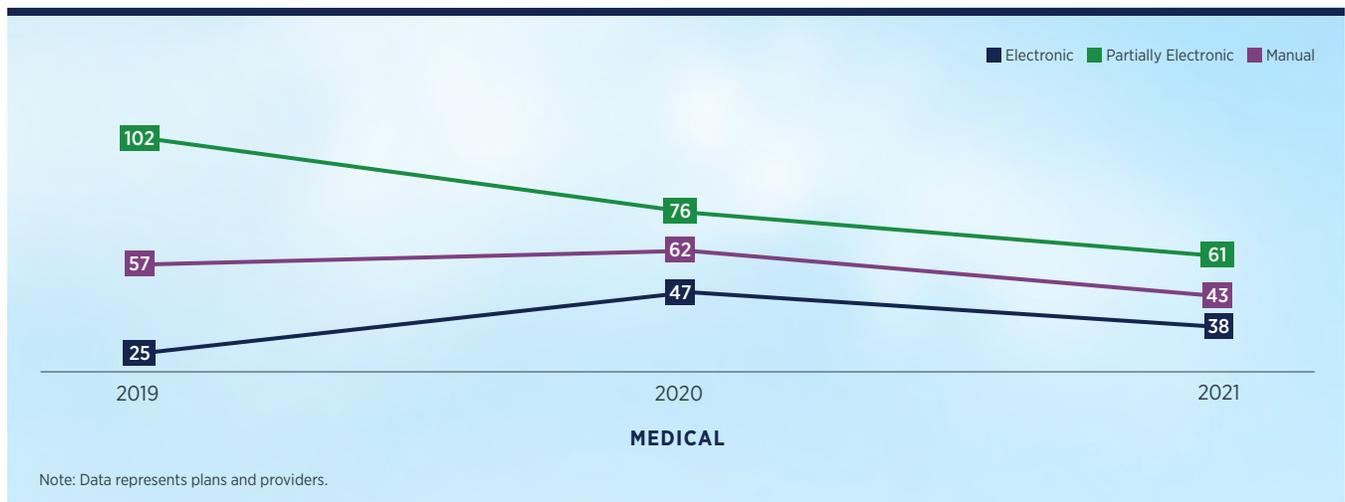
ADOPTION

Medical Plan Adoption of Prior Authorization  
2019-2021 CAQH Index



VOLUME

Estimated National Volume of Prior Authorization by Mode  
2019-2021 CAQH Index (in millions)



## SPEND & SAVINGS

### Prior Authorization: How Much is Spent and Saved With Full Adoption? 2020-2021 CAQH Index (in millions)



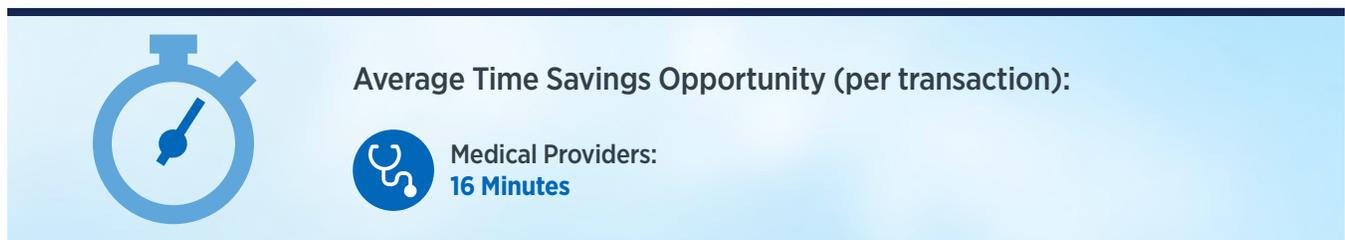
## COST SAVINGS OPPORTUNITY

### Electronic Prior Authorization: Cost Savings Opportunity



## TIME SAVINGS OPPORTUNITY

### Electronic Prior Authorization: Time Savings Opportunity



# 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: XSC X12N 837.

## Transaction Highlights

### 1 Adoption Increased — Remains Highest

For both the medical and dental industries, electronic claim submission increased and remains one of the highest levels of electronic adoption at 97 and 84 percent, respectively.

### 2 Medical Claims Volume Declined Initially Then Stabilized, Dental Decreased

In the early months of the pandemic, claim submission volume declined by nine percent as providers and patients followed social distancing guidelines resulting in lower healthcare utilization.<sup>29</sup> However, as the year progressed, medical claim submissions stabilized as telehealth services expanded for non-emergency cases. In contrast, the dental industry experienced a decline in total volume (18 percent) as utilization declined across the board.

### 3 Medical Spending Increased

Spending associated with conducting medical claim submissions increased by ten percent and accounted for 16 percent of the total annual medical spend (\$6.1 billion), the second highest after eligibility and benefit verification. The increase in total annual medical spend can be attributed to providers spending more time and resources conducting manual transactions (an increase of three minutes per transaction). In some cases, providers had to submit new information related to telehealth and COVID-19 and often engaged extensively with health plans using manual methods which increased the time and cost to conduct a manual transaction.

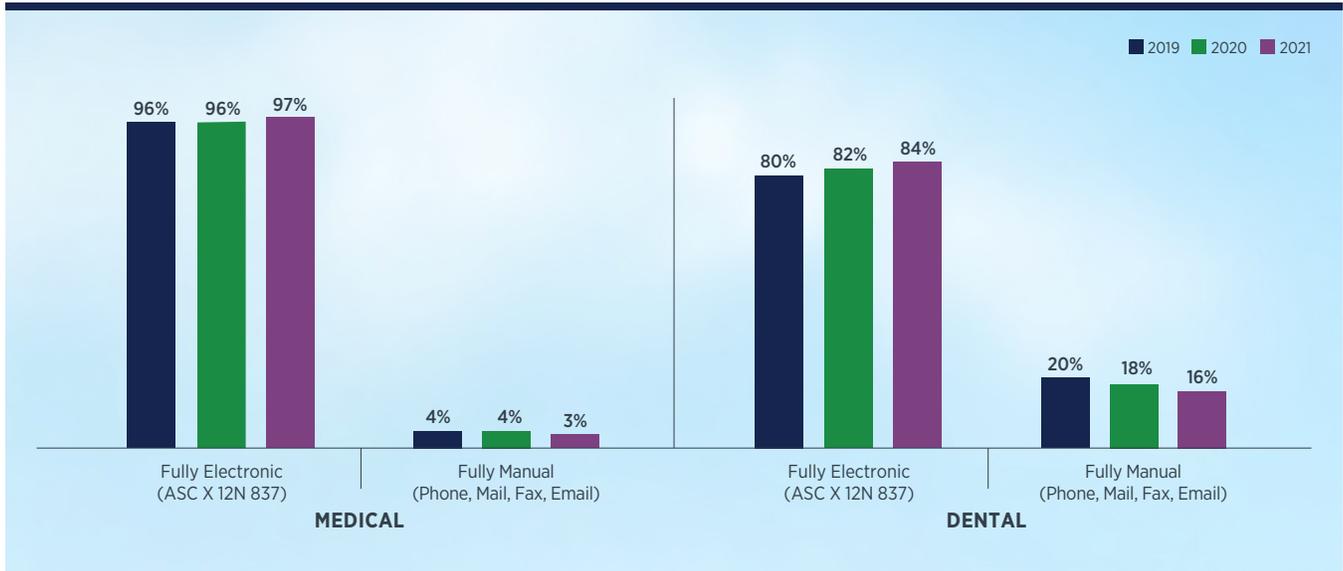
### 4 Medical Cost Savings Opportunity Increased, Dental Remained Stable

In addition to the increase in medical spending, the cost savings opportunity associated with switching to the electronic standard more than tripled to \$1.7 billion due to the increase in manual provider volume and cost per transaction coupled with a decline in electronic cost. For the dental industry, the cost savings opportunity remained relatively stable.

<sup>29</sup> "Healthcare Utilization During a Pandemic: How COVID-19 Impacted Administrative Transactions," CAQH Explorations, May 2021, <https://www.caqh.org/sites/default/files/covid-issue-brief.pdf>.

ADOPTION

Medical and Dental Plan Adoption of Claim Submission  
2019-2021 CAQH Index



VOLUME

Estimated National Volume of Claim Submission by Mode  
2019-2021 CAQH Index (in millions)



## SPEND & SAVINGS

### Claim Submission: How Much is Spent and Saved With Full Adoption? 2020-2021 CAQH Index (in millions)



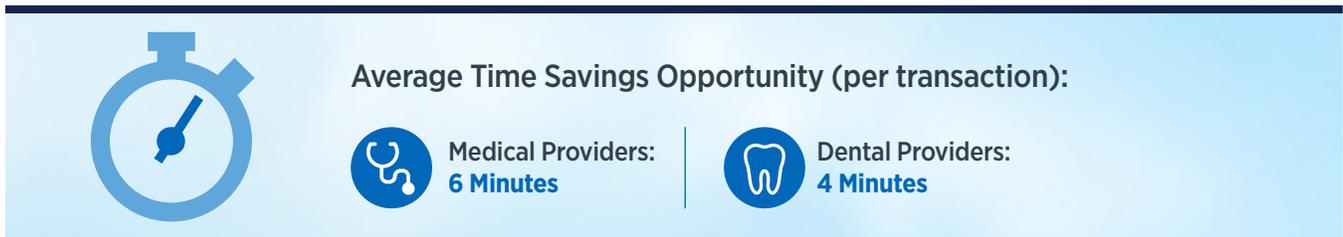
## COST SAVINGS OPPORTUNITY

### Electronic Claim Submission: Cost Savings Opportunity



## TIME SAVINGS OPPORTUNITY

### Electronic Claim Submission: Time Savings Opportunity



# 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

### 1 Low Adoption

Electronic adoption remains low for both industries as a federal standard has yet to be mandated. Health plans and vendors are reluctant to create automated solutions without federal guidance and industry support.

### 2 Medical Volume Decreased, Dental Increased Slightly

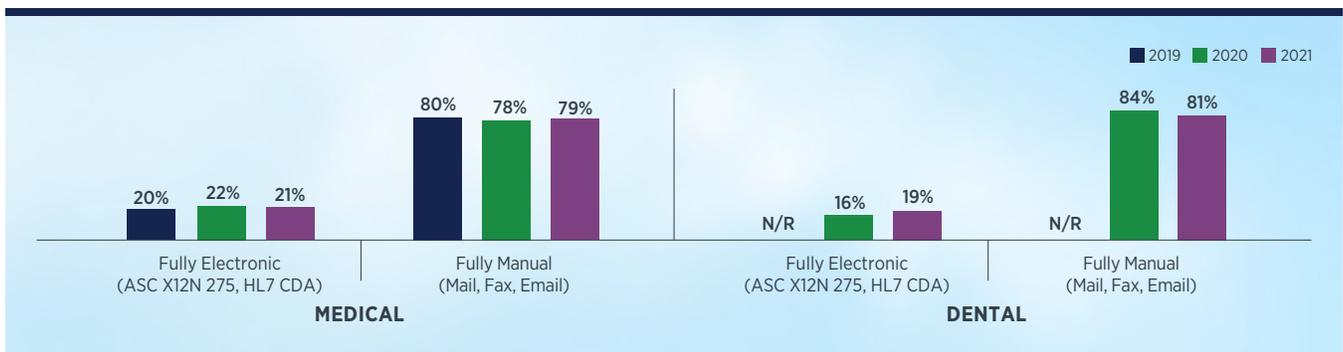
Fewer attachments were exchanged between medical plans and providers as fewer prior authorizations were conducted. In comparison, the dental industry experienced a slight increase in overall attachment volume driven by an increase in the use of electronic attachments.

### 3 Medical Spending Decreased

Despite the increase in per transaction cost for medical plans to submit a manual attachment, the lower volume for medical plans and providers resulted in a 28 percent decline in attachment spend, the largest decline among the medical transactions.

## ADOPTION

### Medical Plan Adoption of Attachments 2019-2021 CAQH Index



VOLUME

Estimated National Volume of Attachments by Mode  
2019-2021 CAQH Index (in millions)



SPEND & SAVINGS

Attachments: How Much is Spent and Saved With Full Adoption?  
2020-2021 CAQH Index (in millions)



## COST SAVINGS OPPORTUNITY

### Electronic Attachments: Cost Savings Opportunity



**\$286 Million** in Cost Savings Opportunity Annually  
for the Medical Industry



Medical Industry:  
**\$286M**

## TIME SAVINGS OPPORTUNITY

### Electronic Attachments: Time Savings Opportunity



Average Time Savings Opportunity (per transaction):



Medical Providers:  
**6 Minutes**

### CAQH CORE Attachments Operating Rules for Prior Authorization and Claims Connect Administrative and Clinical Data

In 2019, CAQH CORE launched an Attachments Advisory Group to officially begin the operating rule development process for attachments given the industry clamor for automation and uniformity. The group evaluated pain points caused by the exchange of additional documentation and established opportunity areas to pursue in the CAQH CORE Attachments Subgroup.

The CAQH CORE Attachments Subgroup launched in Q3 2020 to evaluate opportunities identified and prioritized by the CAQH CORE Attachments Advisory Group with the goal of developing attachments operating rules to support prior authorizations and health care claims. The draft rules establish infrastructure and data content requirements for attachments and support both existing and emerging standards including the X12 275, HL7 CDA and FHIR. These attachments rules will provide consistency across the prior authorization and claims attachments use cases and help the industry with the needed connection of administrative and clinical data.

The draft rules are expected to progress through the CAQH CORE voting process and be available to industry in Q1 2022.

For more information, visit: <https://www.caqh.org/core/additional-medical-documentationattachments>.

# 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.

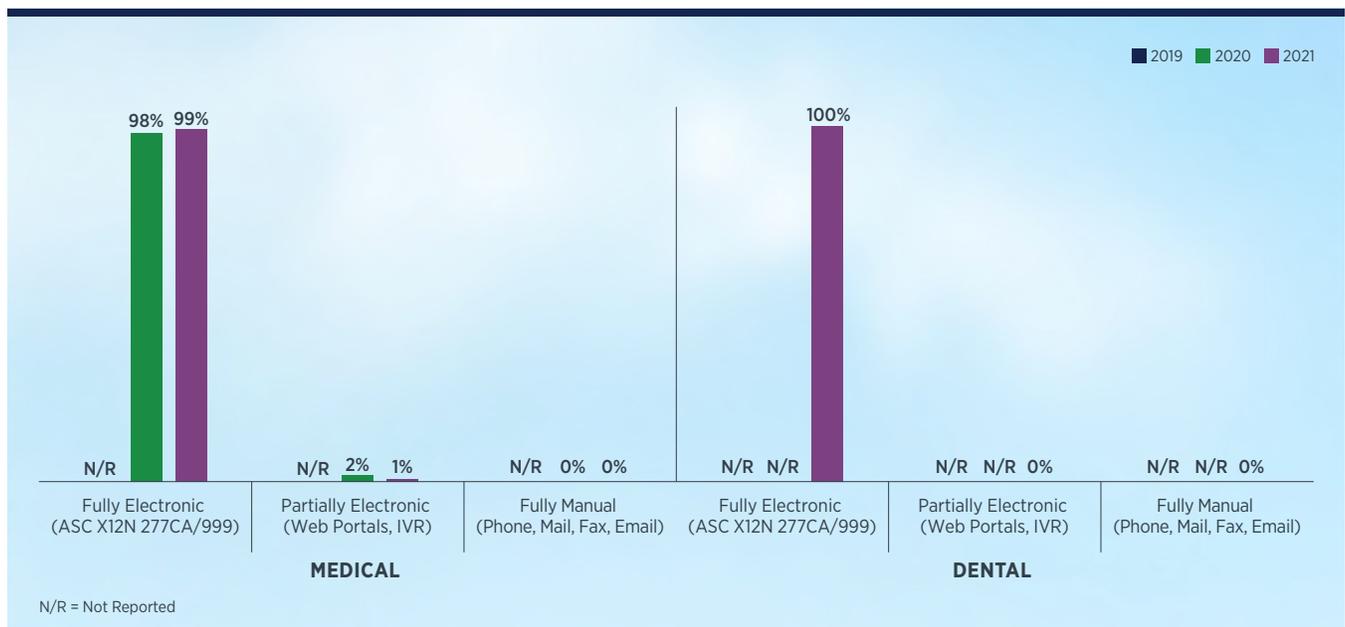
## Transaction Highlights

### 1 Highest Adoption

Given that the majority of health plan systems auto generate a confirmation response after receiving information from a provider or clearinghouse, medical plan adoption is almost 100 percent. Procedures and processes that were implemented to help deal with the pandemic and its effect on healthcare utilization and the revenue cycle workflow did not impact these systems.

## ADOPTION

### Medical and Dental Plan Adoption of Acknowledgements 2019-2021 CAQH Index



VOLUME

Estimated National Volume of Acknowledgements by Mode  
2019-2021 CAQH Index (in millions)



# 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 Adoption Decreased

Electronic adoption for coordination of benefits (COB) decreased as complexities in coverage during COVID-19 resulted in more manual interactions.

### 2 Volume Decreased, Cost to Conduct Increased

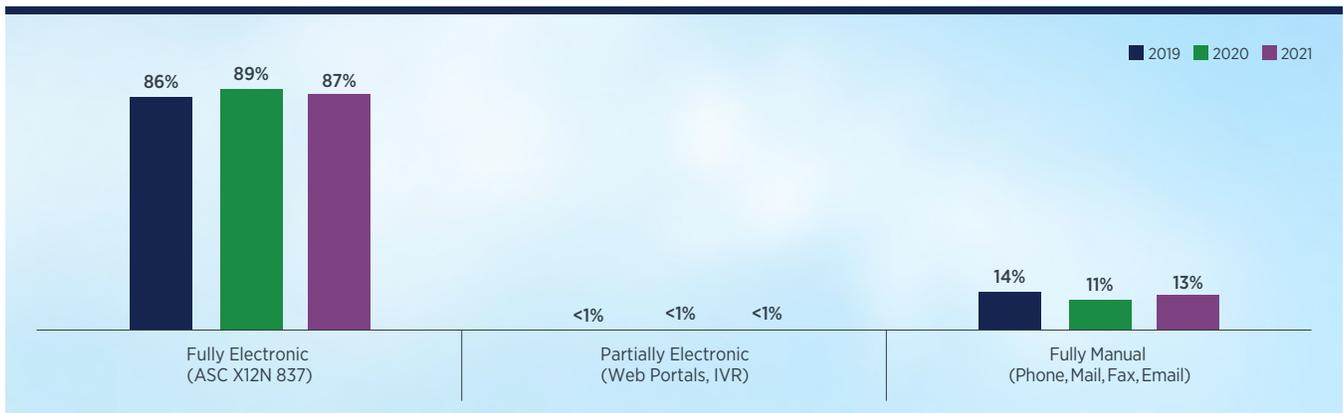
Although fewer coordination of benefits were conducted, the cost to conduct a COB increased for all modes as health plans performed additional steps to identify individual coverage information. Job losses and changes caused by the pandemic often resulted in coverage status changing multiple times within the year.

### 3 Cost Savings Opportunity Remained Stable

Despite the increase in cost to conduct a COB transaction, the cost savings opportunity remained stable due to the drop in overall volume.

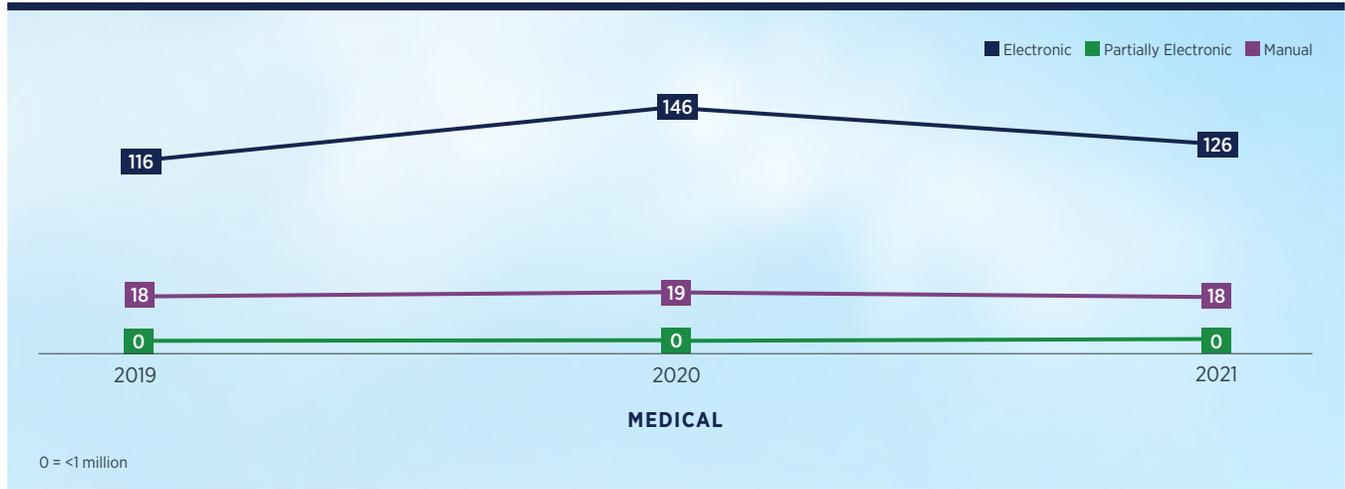
## ADOPTION

### Medical Plan Adoption of Coordination of Benefits 2019-2021 CAQH Index



VOLUME

Estimated National Volume of Coordination of Benefits by Mode  
2019-2021 CAQH Index (in millions)



SPEND & SAVINGS

Coordination of Benefits: How Much is Spent and Saved With Full Adoption?  
2020-2021 CAQH Index (in millions)



COST SAVINGS OPPORTUNITY

Electronic Coordination of Benefits: Cost Savings Opportunity

**\$20M**

**\$20 Million** in Cost Savings Opportunity Annually  
for the Medical Industry

Medical Industry:  
**\$20M**

# 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 Decreased, Dental Increased

Claim status inquiry is one of the few transactions that experienced a drop in electronic adoption for medical plans. New policies and guidelines related to telemedicine and COVID-19 resulted in providers using more manual methods to inquire about the status of a claim. Conversely, electronic adoption increased for dental plans along with adoption improvements noted for all dental transactions.

### 2 Medical Volume Decreased, Dental Remained Stable

Claim status inquiry volume decreased ten percent for the medical industry due to a decrease in utilization and temporary closings of call centers during the peak of the pandemic. Volume remained stable for the dental industry as dental providers checked on the status of outstanding claims while offices were closed and utilization was low.

### 3 Medical Manual Costs Increased, Dental Decreased

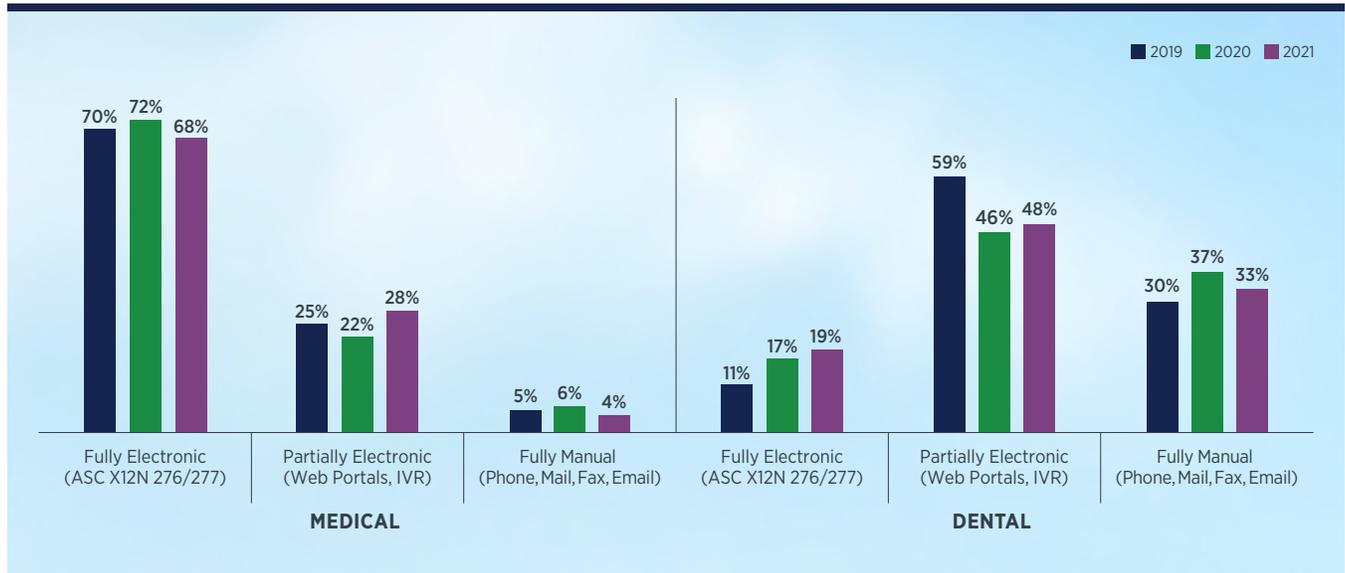
Due to changes throughout the pandemic in telemedicine requirements which often resulted in time-consuming manual inquiries, the cost to conduct a manual transaction increased significantly for medical plans and providers and was the most time-consuming transaction for providers to conduct manually (on average 25 minutes per inquiry). For dental providers, the cost to conduct a claim status inquiry dropped for all modes given that the complexities of telemedicine and COVID-19 were typically not applicable to the dental industry.

### 4 Cost Savings Opportunity — Second Highest

For both industries, claim status inquiry is the second highest cost savings opportunity. By switching to electronic transactions, the medical industry could save \$3.1 billion and the dental industry could save \$690 million.

ADOPTION

Medical and Dental Plan Adoption of Claim Status Inquiry  
2019-2021 CAQH Index



VOLUME

Estimated National Volume of Claim Status Inquiry by Mode  
2019-2021 CAQH Index (in millions)



**SPEND & SAVINGS**

**Claim Status Inquiry: How Much is Spent and Saved With Full Adoption?  
2020-2021 CAQH Index (in millions)**



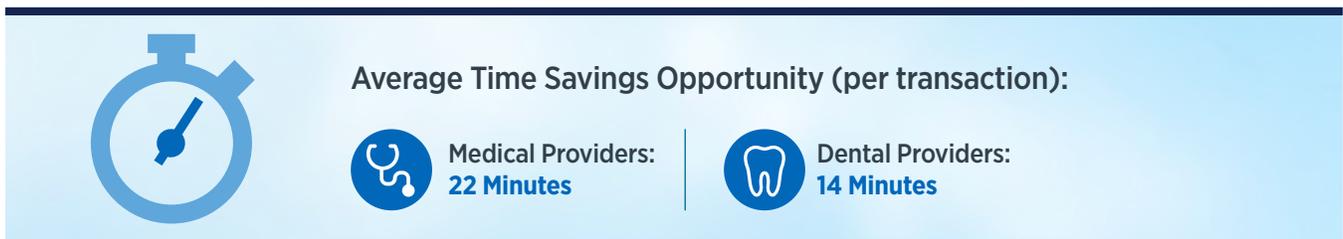
**COST SAVINGS OPPORTUNITY**

**Electronic Claim Status Inquiry: Cost Savings Opportunity**



**TIME SAVINGS OPPORTUNITY**

**Electronic Claim Status Inquiry: Time Savings Opportunity**



# 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

Adoption of electronic payments continued to increase for the medical and dental industries as lower utilization resulted in providers seeking to be paid more quickly through electronic methods.

### 2 Medical Volume Increased, Dental Decreased

As opposed to other transactions, claim payment experienced a significant 60 percent increase in total medical industry volume. Medical providers indicated that during the early months of the pandemic, when healthcare utilization was low, they spent time reconciling past due payments. One health plan indicated that the increase in volume was due largely to plans reimbursing claims that were unsettled before COVID-19. As telemedicine services became available and popular, providers also billed more regularly for telemedicine visits to help offset the loss of revenue experienced early in the pandemic. Conversely, the dental industry experienced the largest decrease in total volume for claim payment and claim submission (18 percent) due to fewer patient visits during COVID-19.

### 3 Medical Spend and Cost Savings Opportunity Increased

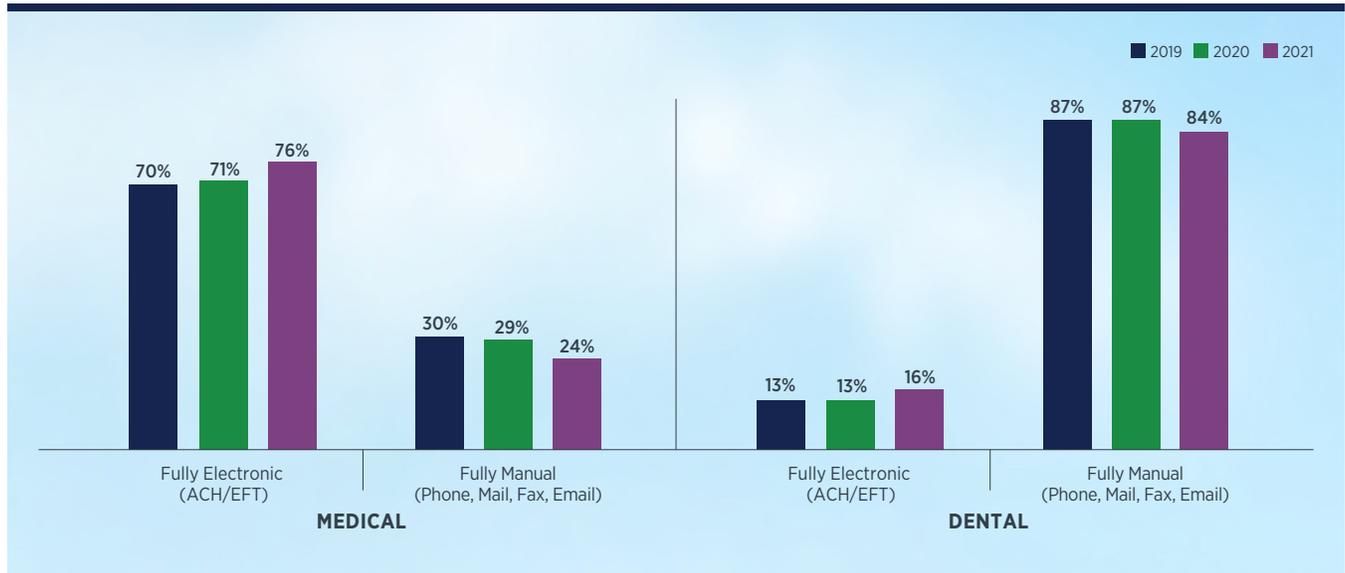
As payment volume increased for the medical industry, payment transaction costs also increased for medical providers. The increase in volume and provider costs resulted in an 89 percent increase in spend to \$2.2 billion. The cost savings opportunity associated with switching from manual to electronic payments also increased by 35 percent to \$577 million.

### 4 Dental Spend and Cost Savings Opportunity Decreased

In comparison, the dental industry spent 30 percent less processing claim payments due to reductions in utilization, the second largest drop in spend after remittance advice (33 percent). The cost savings opportunity also declined as volume and provider costs to process a claim dropped.

ADOPTION

Medical and Dental Plan Adoption of Claim Payment  
2019-2021 CAQH Index



VOLUME

Estimated National Volume of Claim Payment by Mode  
2019-2021 CAQH Index (in millions)



## SPEND & SAVINGS

### Claim Payment: How Much is Spent and Saved With Full Adoption? 2020-2021 CAQH Index (in millions)



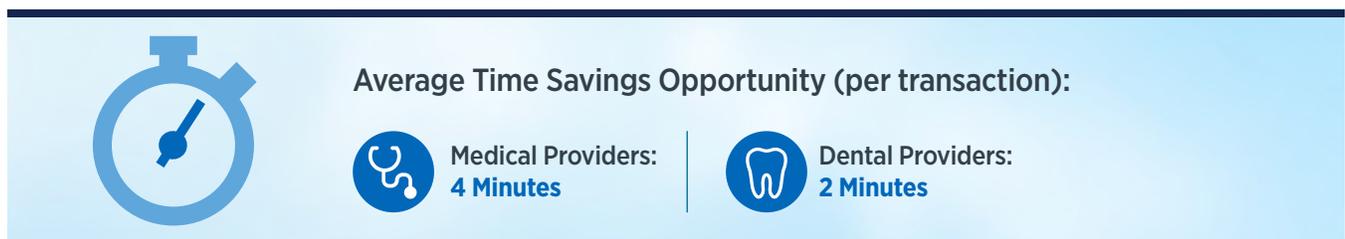
## COST SAVINGS OPPORTUNITY

### Electronic Claim Payment: Cost Savings Opportunity



## TIME SAVINGS OPPORTUNITY

### Electronic Claim Payment: Time Savings Opportunity



# Remittance Advice

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## 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 Medical Adoption Increased, Dental Remained Stable

For the medical industry, adoption of electronic remittance advice increased seven percentage points while it remained fairly stable for the dental industry.

### 2 Volume Decreased

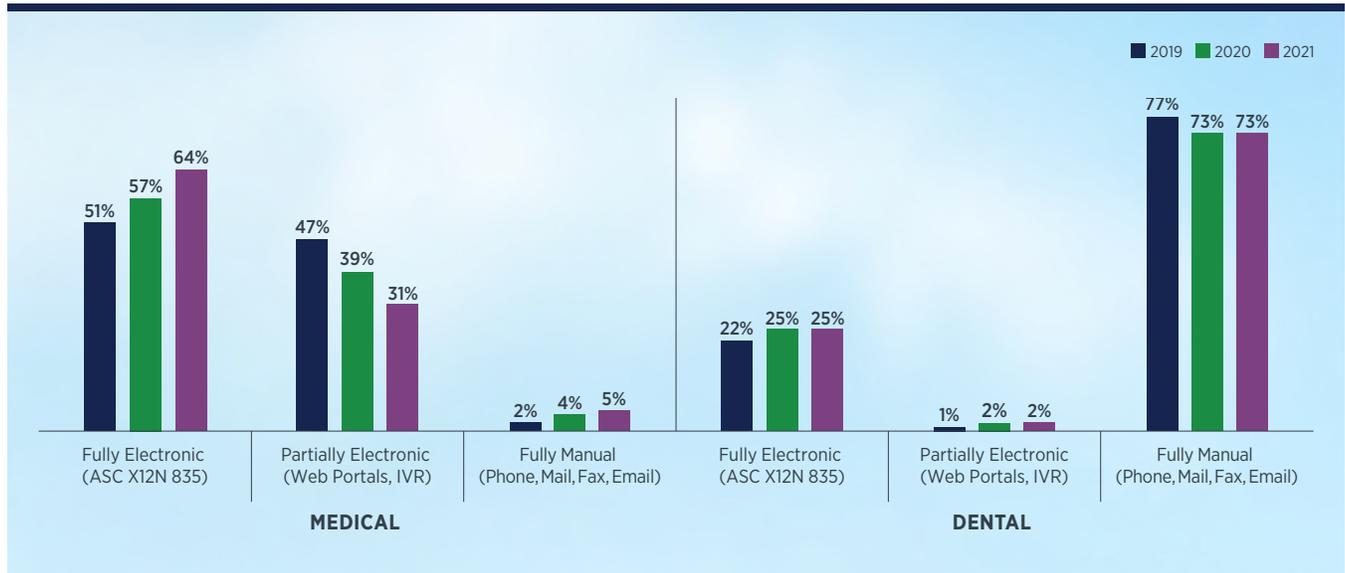
Fewer remittance advices were conducted in the medical industry (31 percent decrease) as fewer services were performed and more remittance advices were transmitted electronically in batches as a single transaction. For the dental industry, remittance advice volume dropped only slightly (two percent). Many dental providers pulled remittance advices as they reviewed and reconciled outstanding accounts payable and receivable when office visits were low. Additionally, remittance advices were automatically pulled for dental service organizations (DSOs) as part of their reconciliation process. In these instances, remittance advices were not linked to new claims or payments but to efforts associated with balancing the accounts.

### 3 Cost Savings Opportunity Decreased — Largest Decrease

Among the transactions studied, the cost savings opportunity associated with conducting electronic remittances decreased the most for the medical and dental industries, declining 30 percent to \$1.8 billion for the medical industry and 36 percent to \$439 million for the dental industry, primarily due to the reduction in volume in both industries.

## ADOPTION

### Medical and Dental Plan Adoption of Remittance Advice 2019-2021 CAQH Index



## VOLUME

### Estimated National Volume of Remittance Advice by Mode 2019-2021 CAQH Index (in millions)



## SPEND & SAVINGS

### Remittance Advice: How Much is Spent and Saved With Full Adoption? 2020-2021 CAQH Index (in millions)



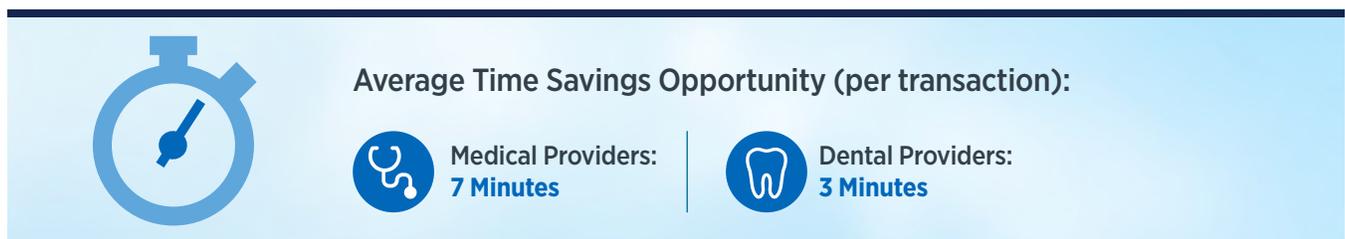
## COST SAVINGS OPPORTUNITY

### Electronic Remittance Advice: Cost Savings Opportunity



## TIME SAVINGS OPPORTUNITY

### Electronic Remittance Advice: Time Savings Opportunity

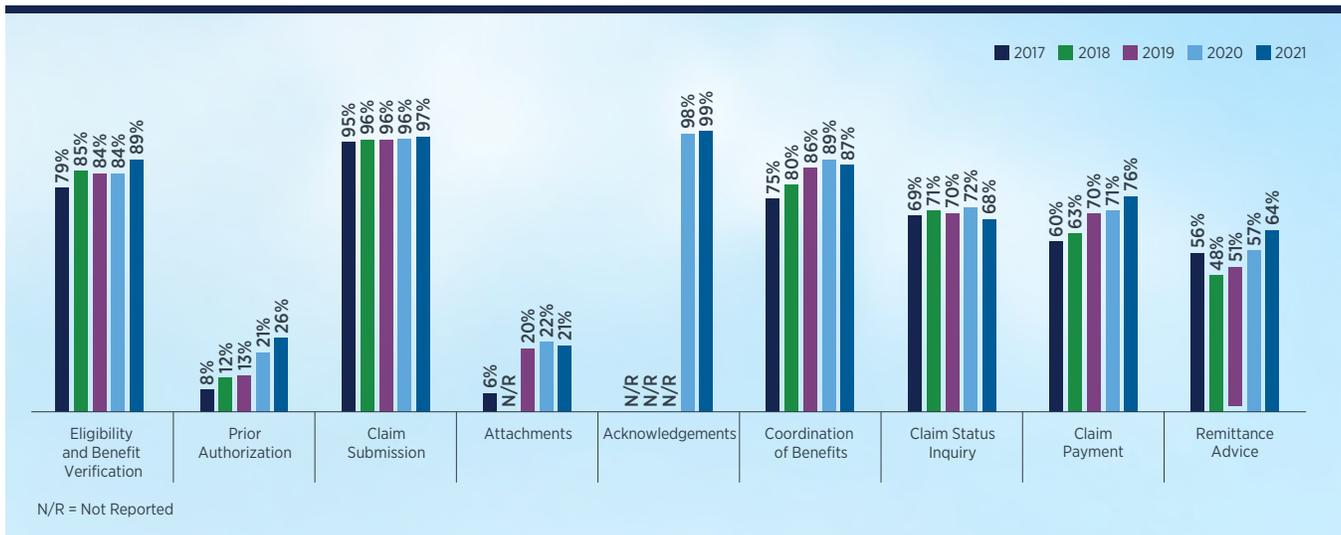


# Overall Key Metrics

The CAQH Index benchmarks adoption, volume, cost savings opportunities and spend for transactions along the administrative workflow. The following metrics help measure progress towards an automated workflow. By tracking progress, the industry can more easily identify barriers that may be delaying automation and administrative simplification and focus efforts on them.

## ADOPTION

### Medical Plan Adoption of Fully Electronic Administrative Transactions 2017-2021 CAQH Index

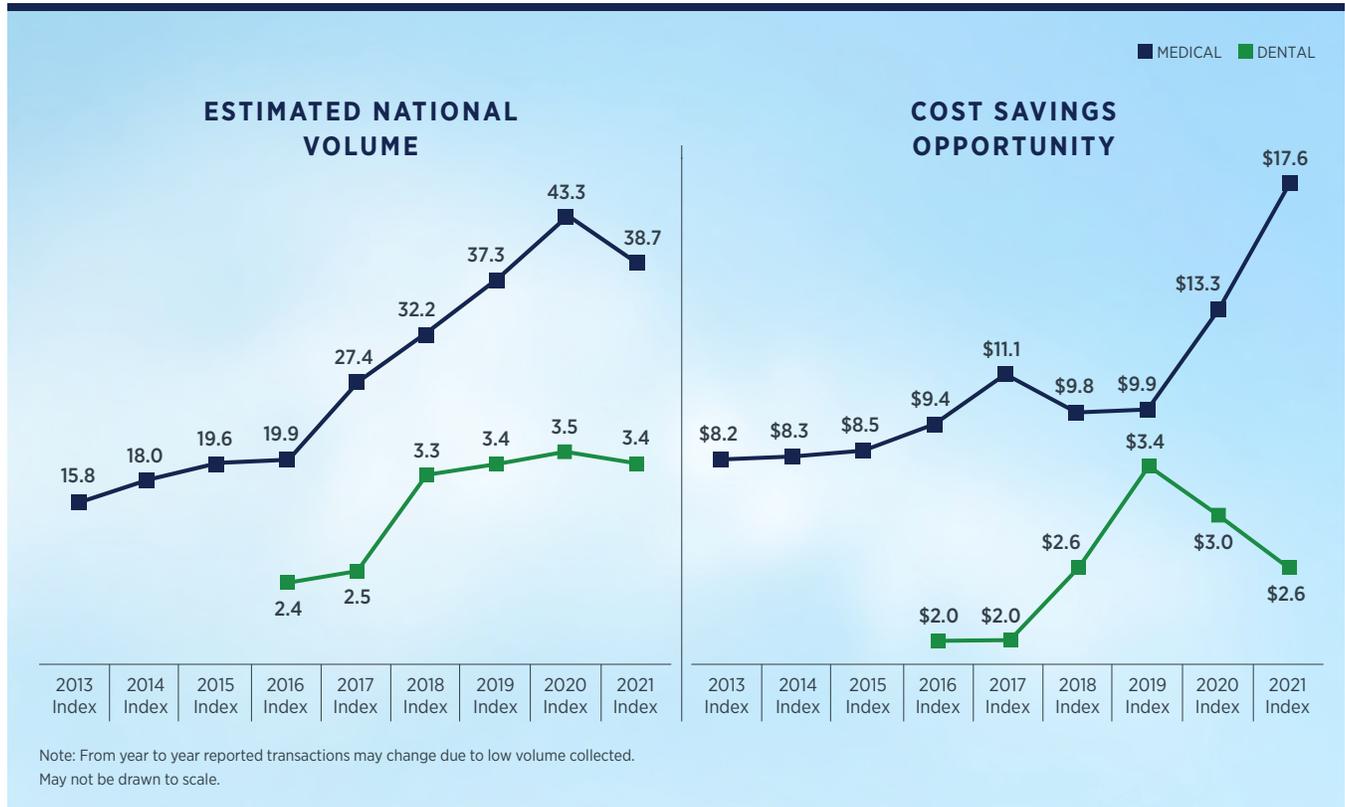


### Dental Plan Adoption of Fully Electronic Administrative Transactions 2017-2021 CAQH Index



# VOLUME

## Medical and Dental Industry Estimated National Volume and Cost Savings Opportunity 2013-2021 CAQH Index (in billions)



# SPEND & SAVINGS

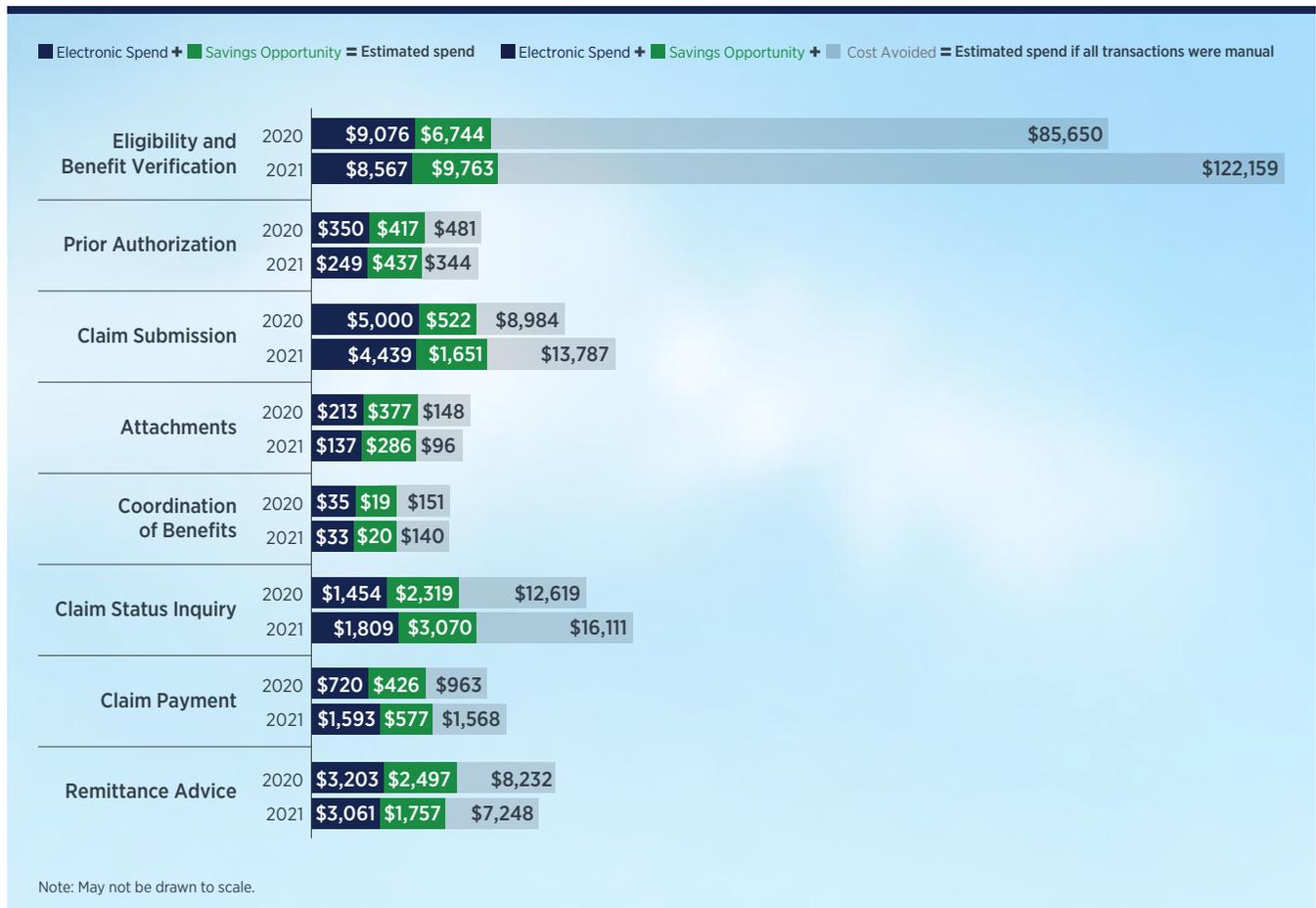
## Medical and Dental Industry Estimated National Spend 2019-2021 CAQH Index (in billions)



## Medical and Dental Industry Estimated National Spend and Savings 2020-2021 CAQH Index (in billions)



## Medical Industry Estimated National Spend and Savings by Transaction 2020-2021 CAQH Index (in millions)



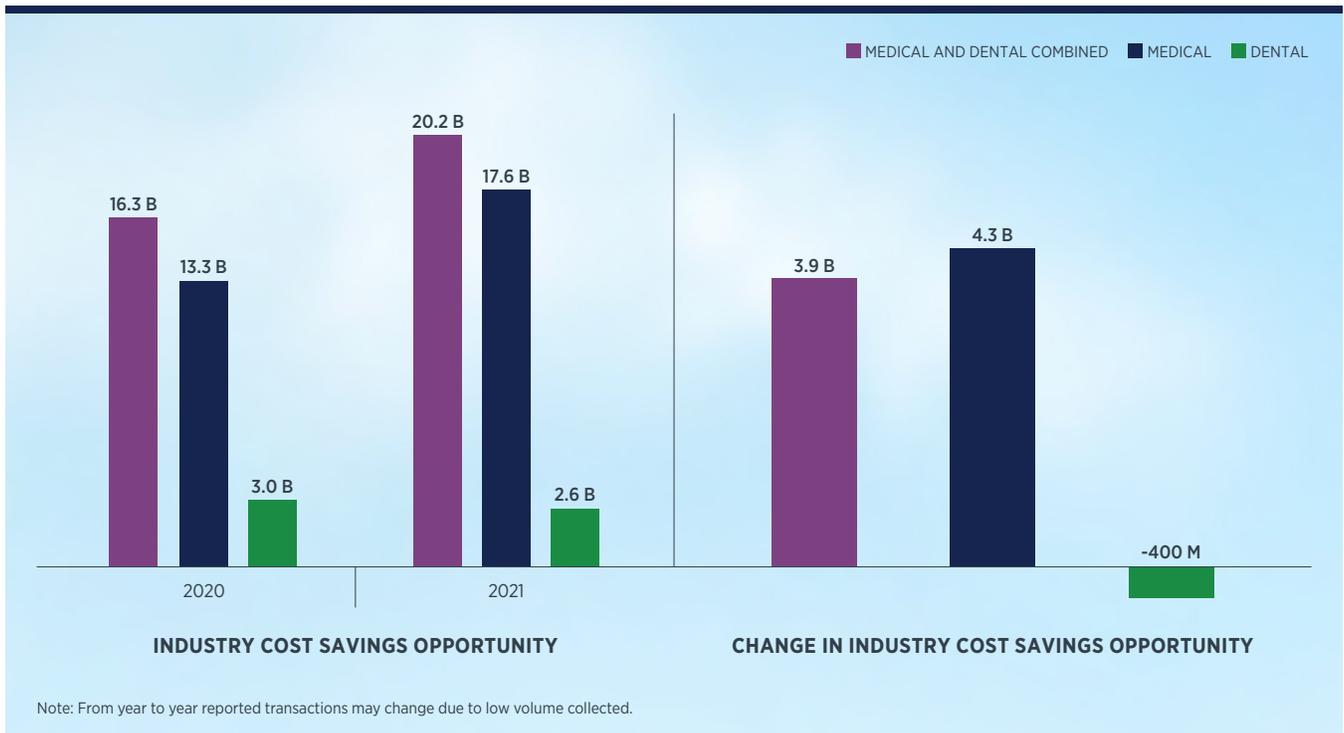
## Dental Industry Estimated National Spend and Savings by Transaction 2020-2021 CAQH Index (in millions)



## Medical and Dental Industry Estimated National Cost Avoided 2019-2021 CAQH Index (in billions)



## Medical and Dental Industry Estimated Cost Savings Opportunity and Year-Over-Year Change 2020-2021 CAQH Index



# Cost Savings Opportunity Tables

The following tables provide information by mode for medical and dental plans, providers and industry on the average cost per transaction, estimated national volumes and the per transaction and estimated national cost savings opportunities by switching to fully electronic transactions. Knowing the full cost and volume of transactions associated with the administrative workflow, and the level of cost savings opportunities, helps organizations measure efficiency and identify areas for improvement. Through targeted efforts, the industry can work together to streamline processes through automation and reduce the cost and time associated with administrative tasks.

Average Cost and Savings Opportunity per Transaction by Mode, Medical, 2021 CAQH Index							
Transaction	Mode	Plan Cost	Provider Cost	Industry Cost	Plan Cost Savings Opportunity	Provider Cost Savings Opportunity	Industry Cost Savings Opportunity
<b>Eligibility and Benefit Verification</b>	Manual	\$ 4.55	\$ 11.52	\$ 16.07	\$ 4.52	\$ 10.57	\$ 15.09
	Partial	\$ 0.03	\$ 3.62	\$ 3.65	\$ 0.00	\$ 2.67	\$ 2.67
	Electronic	\$ 0.03	\$ 0.95	\$ 0.98			
<b>Prior Authorization</b>	Manual	\$ 3.54	\$ 10.95	\$ 14.49	\$ 3.47	\$ 7.52	\$ 10.99
	Partial	\$ 0.07	\$ 9.93	\$ 10.00	\$ 0.00	\$ 6.50	\$ 6.50
	Electronic	\$ 0.07	\$ 3.43	\$ 3.50			
<b>Claim Submission</b>	Manual	\$ 1.10	\$ 3.96	\$ 5.06	\$ 1.01	\$ 2.92	\$ 3.93
	Electronic	\$ 0.09	\$ 1.04	\$ 1.13			
<b>Attachments</b>	Manual	\$ 1.03	\$ 4.43	\$ 5.46	\$ 0.92	\$ 3.10	\$ 4.02
	Electronic	\$ 0.11	\$ 1.33	\$ 1.44			
<b>Coordination of Benefits</b>	Manual	\$ 1.34	N/A	\$ 1.34	\$ 1.11	N/A	\$ 1.11
	Partial	\$ 0.23	N/A	\$ 0.23	\$ 0.00	N/A	\$ 0.00
	Electronic	\$ 0.23	N/A	\$ 0.23			
<b>Claim Status Inquiry</b>	Manual	\$ 4.56	\$ 13.66	\$ 18.22	\$ 4.53	\$ 12.12	\$ 16.65
	Partial	\$ 0.03	\$ 4.69	\$ 4.72	\$ 0.00	\$ 3.15	\$ 3.15
	Electronic	\$ 0.03	\$ 1.54	\$ 1.57			
<b>Claim Payment</b>	Manual	\$ 0.49	\$ 3.64	\$ 4.13	\$ 0.41	\$ 1.96	\$ 2.37
	Electronic	\$ 0.08	\$ 1.68	\$ 1.76			
<b>Remittance Advice</b>	Manual	\$ 0.50	\$ 4.94	\$ 5.44	\$ 0.43	\$ 3.63	\$ 4.06
	Partial	\$ 0.07	\$ 2.63	\$ 2.70	\$ 0.00	\$ 1.32	\$ 1.32
	Electronic	\$ 0.07	\$ 1.31	\$ 1.38			

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, partial electronic, electronic). For some transactions, partial costs were not reported.

## Average Cost and Savings Opportunity per Transaction by Mode, Dental, 2021 CAQH Index

Transaction	Mode	Plan Cost	Provider Cost	Industry Cost	Plan Cost Savings Opportunity	Provider Cost Savings Opportunity	Industry Cost Savings Opportunity
<b>Eligibility and Benefit Verification</b>	Manual	\$ 3.30	\$ 6.83	\$ 10.13	\$ 3.27	\$ 5.85	\$ 9.12
	Partial	\$ 0.03	\$ 4.15	\$ 4.18	\$ 0.00	\$ 3.17	\$ 3.17
	Electronic	\$ 0.03	\$ 0.98	\$ 1.01			
<b>Claim Submission</b>	Manual	\$ 0.44	\$ 3.35	\$ 3.79	\$ 0.34	\$ 2.29	\$ 2.63
	Electronic	\$ 0.10	\$ 1.06	\$ 1.16			
<b>Claim Status Inquiry</b>	Manual	\$ 3.30	\$ 8.85	\$ 12.15	\$ 3.27	\$ 7.49	\$ 10.76
	Partial	\$ 0.03	\$ 3.70	\$ 3.73	\$ 0.00	\$ 2.34	\$ 2.34
	Electronic	\$ 0.03	\$ 1.36	\$ 1.39			
<b>Claim Payment</b>	Manual	\$ 0.19	\$ 2.59	\$ 2.78	\$ 0.18	\$ 1.26	\$ 1.44
	Electronic	\$ 0.01	\$ 1.33	\$ 1.34			
<b>Remittance Advice</b>	Manual	\$ 0.16	\$ 2.71	\$ 2.87	\$ 0.14	\$ 1.46	\$ 1.60
	Partial	\$ 0.02	\$ 2.75	\$ 2.77	\$ 0.00	\$ 1.50	\$ 1.50
	Electronic	\$ 0.02	\$ 1.25	\$ 1.27			

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, partial electronic, electronic). For some transactions, partial costs were not reported.

## Estimated National Volume and Cost Savings Opportunity by Mode, Medical, 2021 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 \$)		
<b>Eligibility and Benefit Verification</b>	Manual	109	393	\$ 493	\$ 9,270	\$ 9,763
	Partial	865	1,916			
	Electronic	7,769	6,433			
<b>Prior Authorization</b>	Manual	25	18	\$ 87	\$ 350	\$ 437
	Partial	28	33			
	Electronic	18	20			
<b>Claim Submission</b>	Manual	111	527	\$ 112	\$ 1,539	\$ 1,651
	Electronic	3,818	3,401			
<b>Attachments</b>	Manual	75	70	\$ 69	\$ 217	\$ 286
	Electronic	20	25			
<b>Acknowledgements</b>	Manual	*	N/R	N/R	N/R	N/R
	Partial	47	N/R			
	Electronic	4,235	N/R			
<b>Coordination of Benefits</b>	Manual	18	N/A	\$ 20	N/A	\$ 20
	Partial	*	N/A			
	Electronic	126	N/A			
<b>Claim Status Inquiry</b>	Manual	51	117	\$ 231	\$ 2,839	\$ 3,070
	Partial	322	451			
	Electronic	779	584			
<b>Claim Payment</b>	Manual	213	250	\$ 87	\$ 490	\$ 577
	Electronic	692	655			
<b>Remittance Advice</b>	Manual	104	255	\$ 45	\$ 1,712	\$ 1,757
	Partial	685	596			
	Electronic	1,430	1,367			
<b>Transaction Total</b>	<b>Manual</b>	<b>706</b>	<b>1,630</b>	<b>\$ 1,144</b>	<b>\$ 16,417</b>	<b>\$ 17,561</b>
	<b>Partial</b>	<b>1,947</b>	<b>2,996</b>			
	<b>Electronic</b>	<b>18,887</b>	<b>12,485</b>			

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, partial electronic, electronic). For some transactions, partial costs were not reported.

## Estimated National Volume and Cost Savings Opportunity by Mode, Dental, 2021 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 \$)		
<b>Eligibility and Benefit Verification</b>	Manual	27	44	\$ 88	\$ 751	\$ 839
	Partial	82	156			
	Electronic	264	174			
<b>Claim Submission</b>	Manual	55	108	\$ 19	\$ 247	\$ 266
	Electronic	300	248			
<b>Attachments</b>	Manual	32	N/R	N/R	N/R	N/R
	Electronic	8	N/R			
<b>Acknowledgements</b>	Manual	0	N/R	N/R	N/R	N/R
	Partial	0	N/R			
	Electronic	240	N/R			
<b>Claim Status Inquiry</b>	Manual	49	48	\$ 160	\$ 530	\$ 690
	Partial	73	73			
	Electronic	29	31			
<b>Claim Payment</b>	Manual	249	224	\$ 45	\$ 282	\$ 327
	Electronic	47	72			
<b>Remittance Advice</b>	Manual	267	193	\$ 37	\$ 402	\$ 439
	Partial	7	80			
	Electronic	93	94			
<b>Transaction Total</b>	<b>Manual</b>	<b>679</b>	<b>617</b>	<b>\$ 349</b>	<b>\$ 2,212</b>	<b>\$ 2,561</b>
	<b>Partial</b>	<b>162</b>	<b>309</b>			
	<b>Electronic</b>	<b>981</b>	<b>619</b>			

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, partial electronic, electronic). For some transactions, partial costs were not reported.

# Methodology

## Introduction

The CAQH Index measures the adoption of fully electronic, partially electronic and manual administrative transactions over time. Additional trended metrics include volume, spend, cost avoided and the cost savings opportunity by moving from using manual and partially electronic transactions to conducting fully electronic transactions. The 2021 CAQH Index is the ninth 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.<sup>30,31</sup>

## Recruitment

Medical and dental plans and providers were voluntarily recruited to participate in the study using direct outreach through email and telephone, industry conferences, webinars, advertisements, CAQH website and social media. CAQH managed the medical and dental plan and provider recruitment, including developing the invitation list and sending invitations, while collaborating with NORC at the University of Chicago<sup>32</sup> on the recruitment, data collection and analysis for medical and dental providers.

Medical and dental 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 contracted with Eliciting Insights<sup>33</sup> to recruit provider and hospital respondents from their panel. CAQH also partnered with CAQH member organizations, the CAQH Index Advisory Council, 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 were also offered honorariums to encourage participation in the survey.

## Data Collection

The CAQH Index collected data through a voluntary online survey tool from July to September 2021. A fillable PDF and Excel version of the survey was also offered to respondents. Plan and provider data are representative of the 2020 calendar year, January 1 to December 31, 2020. Note that during this time, the healthcare industry was dealing with COVID-19 which impacted utilization and resources.<sup>34</sup>

The 2021 CAQH Index collected data on ten administrative transactions for the medical survey and nine transactions for the dental survey. The medical plan survey also included questions regarding:

- Member not found rate for eligibility and benefit verification.
- Number of claim payments paid in bulk.
- Common methods for exchanging clinical information with trading partners on medical services needing prior authorization and claims.
- Interactions with Fast Healthcare Interoperability Resources (FHIR).
- Exchange mechanisms for value-based payment provider attribution.

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30 AIS Health Data, a Division of Managed Markets Insight and Technology, LLC, AIS's Directory of Health plans: 2020, (2021).

31 National Association of Dental Health Plans, Dental Benefits Report, 2019.

32 NORC at the University of Chicago is an independent research institution that delivers insights and data analysis for government, nonprofits, and businesses. For more information, visit: <https://www.norc.org/Pages/default.aspx>.

33 Eliciting Insights is a healthcare market research and strategy consulting organization for healthcare providers, vendors, and investors. For more information, visit: <http://www.elicitinginsights.com>.

34 "Healthcare Utilization During a Pandemic: How COVID-19 Impacted Administrative Transactions," CAQH Explorations, May 2021, <https://www.caqh.org/sites/default/files/covid-issue-brief.pdf>.

The medical provider survey collected data on eight administrative transactions while the dental provider survey included six transactions. The medical provider survey also included questions regarding:

- Volume and cost of three pharmacy transactions: Prescription/Drug Prior Authorization (NCPDP SCRIPT), Realtime Pharmacy Benefit Prescription Check (NCPDP RTPB) and Formulary and Benefit (NCPDP Standard).

- Common methods for exchanging clinical information with trading partners on medical services needing prior authorizations and claims.
- Exchange mechanisms for value-based payment provider attribution.

Responses to these questions from plans and providers have provided context for some of the results in this report. Issue briefs on some of these topics will be released later this year.

## Overview of Fully Electronic Administrative Transactions Studied, 2021 CAQH Index

Transaction	Transaction Standard	Description
<b>Eligibility and Benefit Verification<sup>†</sup></b>	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. Does not include referrals.
<b>Prior Authorization</b>	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.
<b>Claim Submission</b>	ASC X12N 837	A request to obtain payment or transmission of encounter information for the purpose of reporting delivery of healthcare services.
<b>Attachments</b>	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.
<b>Attachments (VBP)</b>		Medical information or quality measure documents that are submitted with payment under value-based payment (VBP) arrangements.
<b>Acknowledgements</b>	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.
<b>Coordination of Benefits</b>	ASC X12N 837	Claims that are sent to secondary payers with explanation of payment information from the primary payer to determine remaining payment responsibilities.
<b>Claim Status Inquiry<sup>†</sup></b>	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.
<b>Claim Payment<sup>†</sup></b>	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.
<b>Remittance Advice<sup>†</sup></b>	ASC X12N 835	The transmission of explanation of benefits or remittance advice from a health plan to a provider explaining a payment.

<sup>†</sup> 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 202 million covered lives, or 61 percent of the United States enrolled population. Medical plans also accounted for two billion claims received and 12 billion transactions annually. In comparison, dental plans represented 116 million covered lives and approximately 44 percent of the enrolled

population. Dental plans represented a smaller portion of volume with 156 million claims received and a total of 703 million transactions.

All medical and dental plan data is based on medical/surgical and related healthcare claims and inquiries.

Basic Characteristics of Data Contributors, 2015-2021 CAQH Index							
	2015 Index	2016 Index	2017 Index	2018 Index	2019 Index	2020 Index	2021 Index
<b>MEDICAL</b>							
<b>Plan Members (total in millions)</b>	118	140	155	160	154	167	202
<b>Proportion of Total Enrollment (%)</b>	45	46	51	49	47	51	61
<b>Number of Claims Received (total in billions)</b>	1	2	2	2	2	2	2
<b>Number of Transactions (total in billions)</b>	4	5	6	8	8	10	12
<b>DENTAL</b>							
<b>Plan Members (total in millions)</b>	93	112	117	106	111	112	116
<b>Proportion of Total Enrollment (%)</b>	44	46	48	44	44	43	44
<b>Number of Claims Received (total in millions)</b>	158	173	182	177	185	186	156
<b>Number of Transactions (total in millions)</b>	439	564	650	731	726	740	703

## Annual Volume Reported by Medical and Dental Plans, 2020-2021 CAQH Index

Transaction	Number of Transactions (in millions)				Number of Transactions (per member)			
	2020 Index		2021 Index		2020 Index		2021 Index	
	Medical	Dental	Medical	Dental	Medical	Dental	Medical	Dental
<b>Eligibility and Benefit Verification</b>	4,681	168	5,324	164	33	2	28	1
<b>Prior Authorization</b>	34	N/R	38	N/R	<1	N/R	<1	N/R
<b>Claim Submission</b>	2,010	186	2,392	156	12	2	13	1
<b>Attachments</b>	62	5	51	5	<1	<1	<1	<1
<b>Acknowledgements</b>	1,055	N/R	1,468	20	10	N/R	8	<1
<b>Coordination of Benefits</b>	78	N/R	69	N/R	<1	N/R	<1	N/R
<b>Claim Status Inquiry</b>	384	65	402	66	4	1	2	1
<b>Claim Payment</b>	242	155	490	130	2	1	3	1
<b>Remittance Advice</b>	1,636	161	1,338	162	10	1	7	1
<b>Total Transactions</b>	<b>10,182</b>	<b>740</b>	<b>11,572</b>	<b>703</b>	<b>71</b>	<b>7</b>	<b>62</b>	<b>6</b>

N/R = Not Reported

## Data Analyses

All results were aggregated to ensure data privacy from each participant. Benchmarks were calculated and reported only for those transactions where three or more plans or providers participated — nine transactions in total. 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).

**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.

The estimated spend, cost avoided and cost savings opportunity is estimated at a national level using the enrollment numbers, estimated transaction volumes and the weighted cost per transaction by mode from plans and providers.

**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, 2021 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
<b>Eligibility and Benefit Verification</b>	◆	◆	◆	◆	◆	◆	◆	◆	2013	2015
<b>Prior Authorization</b>	◆	N/R	◆		◆		◆		2013	
<b>Claim Submission</b>	◆	◆	◆	◆	◆	◆	◆	◆	2013	2015
<b>Attachments</b>	◆	◆	◆		◆		◆		2014	2016
<b>Acknowledgements</b>	◆	◆							2017	2021
<b>Coordination of Benefits</b>	◆	N/R	◆		◆				2015	
<b>Claim Status Inquiry</b>	◆	◆	◆	◆	◆	◆	◆	◆	2013	2015
<b>Claim Payment</b>	◆	◆	◆	◆	◆	◆	◆	◆	2013	2015
<b>Remittance Advice</b>	◆	◆	◆	◆	◆	◆	◆	◆	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** — Transactions conducted using a HIPAA-mandated standard, unless otherwise specified.

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

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

Medical and dental plan adoption rates were calculated by mode as a proportion of the total volume reported by plans. The annual percentage point change was included for select transactions with at least two years of trended data available and is computed as the arithmetic difference between percentages reported in this report and the 2020 CAQH Index.

## ESTIMATED VOLUME

### Plan Estimated Volume

The total transaction volume is estimated based on the proportion of covered lives represented by participating medical and dental plans using the AIS Directory of Health Plans for medical plans and NADP Dental Health Plan Profiles for dental plans. The extrapolated national volume for each transaction is calculated by mode as follows for both medical plans and dental plans:

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

### Provider Estimated Volume

The total transaction volume is estimated based on the size and type of provider using the American Medical Association (AMA) distributions of physicians by practice

size and type of location<sup>35</sup> and the American Dental (ADA) distributions of dental practice type.<sup>36</sup> For the 2021 weighting methodology, medical providers were split into three groups: Less than 5 physicians (33.6%), 5-50+ physicians (56.5%) and hospitals (9.7%). Dental providers were split into 3 groups: Non-DSO affiliated solo practice (28%), DSO affiliated solo or group practice (8.3%) and non-DSO affiliated group practice (63.7%).

Provider volume was calculated using the average mode distribution by transaction and mode type and by AMA or ADA group size. The AMA and ADA distributions were used to weight the mode distributions reported by medical and dental providers. These weighted distributions by mode were applied to the national estimated plan volume to calculate the national provider estimated volume by mode.

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

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 contributors reporting a valid result using the proportion of their enrollment. The calculation requires both the reporting of a valid transaction volume and transaction cost by a data contributor 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 and average staff time and cost by transaction and mode.

35 Carol K. Kane, "Updated Data on Physician Practice Arrangements: For the First Time, Fewer Physicians are Owners Than Employees," American Medical Association, accessed November 2021, <https://www.ama-assn.org/system/files/2019-07/prp-fewer-owners-benchmark-survey-2018.pdf>.

36 Dentist Profile Snapshot by State: 2016, accessed November 2021, <https://www.ada.org/resources/research/health-policy-institute/dentist-workforce>.

The NORC methodology followed a three-step process to calculate weighted costs per transaction for medical and dental providers:

- The average loaded salary per minute per mode for each provider is created by dividing the average salary by the number of minutes in a work year, then multiplying by a specific loading factor to account for benefit and overhead costs.
- The average loaded cost per transaction mode by

provider created in step one is multiplied by the number of minutes per transaction by mode.

- The estimates from step two are combined across the three AMA (medical) and ADA (dental) groups. The AMA or ADA group level cost per transaction estimates are multiplied by the practice size average proportions to create weighted group cost estimates. Finally, the weighted group cost estimates are then summed to create the overall weighted cost per transaction for each transaction type and mode.

<b>Estimated Medical and Dental Spend, Cost Savings Opportunity and Cost Avoided, 2021 CAQH Index (in millions)</b>					
	<b>Manual Spend*</b>	<b>Estimated Spend</b>	<b>Cost Savings Opportunity</b>	<b>Electronic Spend*</b>	<b>Cost Avoided</b>
<b>MEDICAL</b>					
<b>Eligibility and Benefit Verification</b>	\$ 140,488	\$ 18,330	\$ 9,763	\$ 8,567	\$ 122,159
<b>Prior Authorization</b>	\$ 1,029	\$ 685	\$ 437	\$ 249	\$ 344
<b>Claim Submission</b>	\$ 19,877	\$ 6,090	\$ 1,651	\$ 4,439	\$ 13,787
<b>Attachments</b>	\$ 519	\$ 423	\$ 286	\$ 137	\$ 96
<b>Coordination of Benefits</b>	\$ 194	\$ 53	\$ 20	\$ 33	\$ 140
<b>Claim Status Inquiry</b>	\$ 20,989	\$ 4,878	\$ 3,070	\$ 1,809	\$ 16,111
<b>Claim Payment</b>	\$ 3,738	\$ 2,170	\$ 577	\$ 1,593	\$ 1,568
<b>Remittance Advice</b>	\$ 12,066	\$ 4,818	\$ 1,757	\$ 3,061	\$ 7,248
<b>Total</b>	<b>\$ 198,900</b>	<b>\$ 37,447</b>	<b>\$ 17,561</b>	<b>\$ 19,888</b>	<b>\$ 161,453</b>
<b>DENTAL</b>					
<b>Eligibility and Benefit Verification</b>	\$ 3,785	\$ 1,218	\$ 839	\$ 378	\$ 2,567
<b>Claim Submission</b>	\$ 1,349	\$ 679	\$ 266	\$ 413	\$ 670
<b>Claim Status Inquiry</b>	\$ 1,844	\$ 902	\$ 690	\$ 211	\$ 942
<b>Claim Payment</b>	\$ 823	\$ 724	\$ 327	\$ 397	\$ 99
<b>Remittance Advice</b>	\$ 1,053	\$ 905	\$ 439	\$ 466	\$ 148
<b>Total</b>	<b>\$ 8,854</b>	<b>\$ 4,428</b>	<b>\$ 2,561</b>	<b>\$ 1,865</b>	<b>\$ 4,426</b>
<b>MEDICAL AND DENTAL INDUSTRY</b>					
<b>Total</b>	<b>\$ 207,754</b>	<b>\$ 41,875</b>	<b>\$ 20,122</b>	<b>\$ 21,753</b>	<b>\$ 165,879</b>

\*Spend if all transactions were conducted manually or fully electronically.

## 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 average time for providers to conduct a manual transaction and a fully electronic transaction or the arithmetic difference between the average time for providers to conduct a partially electronic transaction and a fully electronic transaction.

Average, Minimum and Maximum Provider Time Spent Conducting Transactions, Medical, 2021 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	23	3	57	21	
	Partial	7	1	19	5	
	Electronic	2	<1	5		
Prior Authorization	Manual	23	4	66	16	
	Partial	18	1	61	11	
	Electronic	7	1	20		
Claim Submission	Manual	8	<1	30	6	
	Electronic	2	<1	6		
Attachments	Manual	9	1	24	6	
	Electronic	3	<1	10		
Claim Status Inquiry	Manual	25	3	80	22	
	Partial	9	1	20	6	
	Electronic	3	<1	10		
Claim Payment	Manual	7	<1	20	4	
	Electronic	3	<1	10		
Remittance Advice	Manual	9	<1	20	7	
	Partial	5	1	21	3	
	Electronic	2	<1	6		
<b>Total Time Savings Opportunity (Manual)</b>					<b>82</b>	
<b>Total Time Savings Opportunity (Partial)</b>					<b>25</b>	

## Limitations

Some over-counting and under-counting may exist.

- A transaction from a provider may be counted only as fully electronic even if the transaction was initially conducted manually and then converted to fully electronic by a practice management system. Additionally, if a provider calls into a call center with multiple inquiries, the representative may log these as one call rather than reporting each transaction individually.

No direct relationships should be inferred between or among the volumes of transactions.

- 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 encounter information.

- Some transactions may not have a corresponding 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.

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 associated with using clearinghouses or third-party vendors 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, learning curve for a new employee to process a transaction and the mix of specialty type may impact the trending of data.
- During 2020, transactions volumes and costs were impacted by COVID-19, an unprecedented event.

For formatting reasons, some tables and figures may not be drawn exactly to scale.

### Average, Minimum and Maximum Provider Time Spent Conducting Transactions, Dental, 2021 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	2	30	10
	Partial	8	1	19	6
	Electronic	2	<1	4	
Claim Submission	Manual	6	1	15	4
	Electronic	2	<1	5	
Claim Status Inquiry	Manual	17	3	40	14
	Partial	7	1	16	4
	Electronic	3	<1	6	
Claim Payment	Manual	5	1	10	2
	Electronic	3	<1	5	
Remittance Advice	Manual	5	1	12	3
	Partial	5	1	10	3
	Electronic	2	<1	5	
<b>Total Time Savings Opportunity (Manual)</b>					<b>33</b>
<b>Total Time Savings Opportunity (Partial)</b>					<b>13</b>

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The following organizations and individuals contributed to the success of the 2021 CAQH Index:

- Contributing medical and dental plans and providers for submitting their data and completing follow-up interviews.
- NORC at the University of Chicago for supporting the provider data collection and analysis process.
- CAQH Index Advisory Council for their continued guidance and support of the CAQH Index research.

2021 CAQH Index Advisory Council Member	Organization
Amy Neves	Aetna
Bill Riemenschneider	Anthem
Daniel Rosen	athenahealth
Deanna Stohl	Blue Cross Blue Shield of Michigan
Elizabeth Templeton	Florida Blue
Heath Hanwick	Epic
Heather McComas	American Medical Association
Jay Eisenstock	JE Consulting
Krishna Aravamudhan	American Dental Association
Kirstin Burdge	UnitedHealthcare
Lorraine Tunis Doo	Centers for Medicare & Medicaid Services
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Sarah Tilleman	American Dental Association
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Suzanne Lestina	University of Chicago Medical Center
Tab Harris	Florida Blue
Terrence Cunningham	American Hospital Association
Thomas L. Meyers	America's Health Insurance Plans
William Hawes	Centene

Note: To ensure data privacy, CAQH does not make the list of health plan or provider data contributors available.

## How to Participate in the CAQH Index

All medical and dental plans, providers and vendors are encouraged to contribute data to the CAQH Index. Data collection begins in Summer 2022. To participate in the 2022 CAQH Index and for more information, please email [explorations@caqh.org](mailto:explorations@caqh.org).



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