Background

For the past decade, the CAQH Index has tracked the adoption of electronic administrative transactions between medical and dental providers and payers. In that time, it has become an authoritative source of information on our nation’s progress toward a more automated and efficient healthcare system.

To provide a more complete view of the transition to electronic business processes across the industry, in 2019 CAQH launched the Pharmacy Services Index. The Pharmacy Services Index tracks the adoption of electronic transactions associated with verifying insurance coverage for pharmaceuticals and related services, obtaining authorization for care, submitting a claim, and sending and receiving payments (see Methodology section). This first year, the Pharmacy Services Index is able to report information for the eligibility and benefits, prior authorization, and claims submission transactions.

Data for the 2019 CAQH Pharmacy Services Index was contributed by pharmacy benefit managers (PBMs) that represent 65% of all covered lives in the United States.\(^1\) PBMs are intermediaries for health insurers, self-insured employers, union health plans, Medicare Part D prescription drug benefit plans and government purchasers in the selection, purchase, and distribution of pharmaceutical products.\(^2\) In addition to adjudicating pharmacy claims, PBMs negotiate with pharmaceutical manufacturers for rebates and the placement of drugs on formularies. They also assist plan sponsors in managing drug utilization and spend.

Introduction

Due to complexity, spending on healthcare administration is estimated to cost the US economy at least $350 billion annually.\(^3\) Reducing this burden has become a national priority: Congress has taken legislative action, federal and state agencies have enacted regulations, and consumer and industry groups have called for change.

In the 2019 CAQH Index,\(^4\) CAQH estimated that of the $350 billion total burden, $40.6 billion is associated with eight administrative transactions related to medical and dental services. Further automation of these transactions could save our nation’s healthcare system $13.3 billion.
The goals in studying administrative transactions in pharmacy services are twofold: First, the pharmacy sector accounts for approximately 10% of total US healthcare spending. By pinpointing areas where automation is lagging, the CAQH Pharmacy Services Index can serve as a roadmap for reducing manual processes and administrative complexity further.

Second, based on our initial research, a greater percentage of pharmacy-related transactions are conducted electronically compared to other healthcare sectors. By tracking trends among the pharmacy, medical, and dental sectors, best practices can be identified and applied across the healthcare industry to drive down administrative costs.

**Findings**

Based on preliminary research by CAQH, findings suggest that the pharmacy sector conducts a greater percentage of transactions electronically than medical plans and providers. The levels of electronic adoption may reflect the focus of this initial analysis on data provided by PBMs. The experience of providers will be included in future analyses.

The difference in levels of automation may also be attributed to the different workflows and levels of complexity between pharmacy and medical transactions. Pharmacy claims, for example, are generally adjudicated in real time, whereas medical claims are often billed and paid weeks or months after a service is provided.

The following is a summary of findings and comparison of levels of automation between the pharmacy and medical sectors by transaction type.

**Eligibility and Benefit Verification**

As in the medical industry, pharmacy eligibility and benefit verifications are one of the most frequently automated of the transactions studied. In fact, relatively few eligibility and benefit verifications are conducted manually by PBMs (2%) compared to fully electronic means (94%). Similarly, medical plans process 84% of their eligibility and benefit verifications fully electronically.

PBMs conduct significantly fewer (711 million) eligibility and benefit verifications compared to medical plans (9.7 billion). The number of transactions per member for PBMs is three compared to 30 in the medical industry — the highest number per member of all medical transactions measured. This difference is largely because eligibility is often verified as part of the real-time adjudication process for pharmacy claims. In addition, the pharmacy eligibility transaction also returns the patient’s complete formulary information for all therapeutic categories, so separate eligibility requests are often not needed for each medication a patient is prescribed. Due to the variation and complexity of medical benefits, plans and providers often check eligibility at multiple points throughout a patient’s episode of care.

Of note, the 2019 CAQH Pharmacy Services Index only accounts for PBMs and not the interaction between providers and pharmacies. Future analyses will capture information on the provider side of these transactions.

**Prior Authorization**

The adoption of fully electronic prior authorization by PBMs is significantly higher (75%) compared to medical plans (13%), where most prior authorizations are processed manually (33%) or via web portals (54%). There may be a number of reasons for the different levels of electronic prior authorization adoption between the pharmacy and medical industries. One difference may be in how prior authorization transactions are structured. For example, SCRIPT, the NCPDP electronic standard most commonly used for pharmacy prior authorizations, supports one attachment to communicate clinical documentation. Although not a HIPAA-defined standard, as of April 2019, 15 states require payers to support electronic prior authorizations (ePA) through the NCPDP SCRIPT standard. In
addition, under the Medicare Prescription Drug Improvement and Modernization Act (MMA), the Centers for Medicare and Medicaid Services (CMS) specified use of the SCRIPT standard for Medicare Part D. There is no HIPAA defined standard or widely adopted industry standard for attachments to exchange clinical documentation between medical payers and providers that would support prior authorization or other HIPAA mandated transactions. Only 20% of attachments are transmitted electronically in the medical industry.

Other reasons for the different levels of electronic adoption may include differences in work flow, complexity and transparency of prior authorization processes and requirements between the pharmacy and medical industries. For example, drug formularies are typically more defined than healthcare services covered under medical benefits. In addition, medical services may require more and varying types of clinical information and documentation for a prior authorization determination. All of these reasons may explain why medical plans are more likely to process prior authorizations manually or through proprietary web portals.

For both the pharmacy and medical sectors, prior authorization is a comparatively low volume transaction with 0.12 transactions per member for pharmacy and 0.28 per member for medical prior authorizations. Nonetheless, prior authorizations, including those related to pharmacy benefits, are often cited as among the most burdensome administrative transactions and opportunities exist for PBMs to automate further. Of the three pharmacy transactions reported, prior authorization has the lowest electronic adoption rate at 75%, with the remaining 25% of pharmacy prior authorizations conducted manually.

**Claim Submission**

Claim submission is the most widely adopted fully electronic transaction at nearly 100% for both PBMs (99%) and medical plans (96%). The medical sector has experienced a stable trend in the adoption of electronic claim submission over the last few years, suggesting that they are nearing full adoption of electronic claim submission.

For PBMs, claim submission has the highest reported volume out of all the transactions studied at 2.3 billion transactions and eight claims per member. Similarly, medical plans have the second-highest volume (3.6 billion) out of the eight medical transactions reported in the CAQH Index. As a high-volume transaction, the medical industry has been able to reduce costs by nearly $11 billion annually through HIPAA-mandated adoption of fully electronic claim submissions as found in the 2019 CAQH Index report.

**Pharmacy and Medical Industry Adoption by Mode, 2019 CAQH Pharmacy Services Index**

<table>
<thead>
<tr>
<th></th>
<th>Pharmacy</th>
<th>Medical</th>
<th>Pharmacy</th>
<th>Medical</th>
<th>Pharmacy</th>
<th>Medical</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Eligibility and Benefit Verification</strong></td>
<td>94%</td>
<td>84%</td>
<td>75%</td>
<td>13%</td>
<td>99%</td>
<td>96%</td>
</tr>
<tr>
<td><strong>Prior Authorization</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Claim Submission</strong></td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

* Fully electronic eligibility and benefit verification includes HIPAA-mandated ASC X12N 270/271 and NCPDP Telecommunications Standard. For the pharmacy sector, partially electronic eligibility and benefit verification includes real-time pharmacy benefit check (RTPBC). For more information related to the modes and transactions please refer to the Methodology section at the end of the paper.
Next Steps

The findings outlined above are based on data from the PBM side for three pharmacy transactions. As such, the findings provide an initial glimpse into part of the administrative transaction experience of the pharmacy industry. With more robust data from providers and PBMs on a wider range of transactions and metrics, a broader perspective on the sources of administrative burdens in healthcare generally — and in the pharmacy sector in particular — can identify further opportunities for improvement and savings.

In the coming year, CAQH intends to expand its research in the pharmacy sector and will collect information on the cost of performing transactions and the return on investment of automation for both PBMs and providers. CAQH encourages PBMs, providers, and pharmacies to participate, submit data, and contribute to this important industry effort.

### Pharmacy and Medical Industry Estimated Volume by Mode, 2019 CAQH Pharmacy Services Index (in millions)

<table>
<thead>
<tr>
<th></th>
<th>Eligibility and Benefit Verification</th>
<th>Prior Authorization</th>
<th>Claim Submission</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pharmacy</td>
<td>Medical</td>
<td>Pharmacy</td>
</tr>
<tr>
<td>Fully Electronic*</td>
<td>671</td>
<td>8,093</td>
<td>24</td>
</tr>
<tr>
<td>Partially Electronic*</td>
<td>25</td>
<td>1,471</td>
<td></td>
</tr>
<tr>
<td>Manual</td>
<td>15</td>
<td>110</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>711</td>
<td>9,674</td>
<td>32</td>
</tr>
<tr>
<td>Per Member</td>
<td>2.63</td>
<td>29.60</td>
<td>0.12</td>
</tr>
<tr>
<td>Per Claim</td>
<td>0.31</td>
<td>2.66</td>
<td>0.01</td>
</tr>
</tbody>
</table>

* Fully electronic eligibility and benefit verification includes HIPAA-mandated ASC X12N270/271 and NCPDP Telecommunications Standard. For the pharmacy sector, partially electronic eligibility and benefit verification includes real-time pharmacy benefit check (RTPBC). For more information related to the modes and transactions please refer to the Methodology section at the end of the paper.
Methodology

Data Collection
CAQH collaborated with the National Council for Prescription Drug Programs (NCPDP) to promote the 2019 CAQH Pharmacy Services Index and encourage their PBM members to participate. Data submitted to the CAQH Pharmacy Services Index is through a voluntary, survey-based process. Surveys were fielded from Spring 2019 to Spring 2020 for the 2018 calendar year. Point-of-Care Partners (POCP) also contributed to this report.

Adoption and Estimated Volume
All analyses were conducted in the aggregate to ensure individual PBMs are not identifiable. The adoption rate is the degree to which PBMs complete a transaction using fully electronic, partially electronic, or manual methods, as estimated and reported by the participating PBMs. For each transaction, the annual adopted rates were computed as a proportion of the total volume reported by PBMs.

For each transaction, the total volume of transactions occurring in the pharmacy sector is estimated at a national level based on the proportion of covered lives represented by contributing PBMs. The total volume of covered lives is captured from the Pharmaceutical Care Management Association (PCMA). The proportion represented by transaction may vary depending on the data contributor’s ability to report on each transaction.

Transaction Modes
This report only studied pharmacy transaction data reported by PBMs. Interactions with providers and pharmacies are not included. The following transactions are included in the 2019 CAQH Pharmacy Services Index:

<table>
<thead>
<tr>
<th>Transaction Mode</th>
<th>Eligibility and Benefit Verification</th>
<th>Prior Authorization</th>
<th>Claim Submission</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fully Electronic (X12): Automated transactions conducted using the adopted HIPAA standard.</td>
<td></td>
<td>NCPDP SCRIPT</td>
</tr>
<tr>
<td></td>
<td>Fully Electronic (NCPDP): A standard format for the electronic submission of third-party drug claims and other transactions between pharmacy providers, insurance carriers, third-party administrators, and other responsible parties.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Partially Electronic</strong></td>
<td>Electronic mode of communication, but NOT the HIPAA standard. This includes web portals, IVR and direct messaging for medical services. For the pharmacy sector, partially electronic eligibility and benefit verification includes real-time benefit check (RTPBC).</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Manual</strong></td>
<td>Transactions requiring paper, phone, fax, email, or mail.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Endnotes

1 https://www.pcmanet.org/our-industry/


6 https://www.pocp.com/navigator/


9 https://www.mgma.com/resources/revenue-cycle/transforming-the-prior-authorization-process-to-im#:~:text=An%20American%20Medical%20Association%20(AMA,in%20the%20last%20five%20years