

CASE STUDY

PNC: MAXIMIZING STP FOR HEALTHCARE PROVIDERS

WINNER OF CELENT MODEL BANK 2020 AWARD FOR
COMMERCIAL PAYMENTS

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This is an authorized reprint of a Celent Model Bank case study. Although the reprint was prepared for Madaket Health, the analysis has not been changed. For more information, please contact infor@celent.com.

CASE STUDY AT A GLANCE

| | |
|-----------------------|---|
| FINANCIAL INSTITUTION | PNC Bank, National Association |
| INITIATIVE | Healthcare Payer Enrollment Automation |
| SYNOPSIS | PNC recognized a pain point in healthcare providers' revenue cycle: the need for a more efficient payer enrollment process for EFT and e-remittance. PNC Healthcare Payer Enrollment Automation removes extra steps from this process, while also maximizing efficiency and substantially reducing errors. |
| TIMELINES | <ul style="list-style-type: none"> • Start: June 2018 • Goal met to convert all healthcare provider clients to automated payer enrollment by January 2019 • Client self-service user interface (UI) launched Q2 2019 |
| KEY BENEFITS | <ul style="list-style-type: none"> • Extensive quantitative results, ranging from cost and time savings to improved accuracy, including: <ul style="list-style-type: none"> ○ Enrollment turnaround from an average of 32 days to 4.5 days ○ Rejection rate down from 20% to 5% |
| KEY VENDOR | Madaket, a SaaS and API provider that connects healthcare providers and payers |

CELENT PERSPECTIVE

PNC has a 25 year legacy of innovation in healthcare banking. Healthcare Payer Enrollment Automation is a prime example of how PNC can identify a pain point in healthcare providers' revenue cycle and help solve it.

- PNC understands patient billing, third-party payers (insurance companies), claims processing and payments, and has decades of experience with the systems and applications used to accomplish these processes.
- Payer enrollment historically has been an onerous, protracted process, which involves many redundant processes, including data entry.
- Through a strong collaborative approach and API-skilled vendor, PNC was able to build an intuitive UI that allows both internal and external users to be fully functional on day one, with no lengthy user manuals or required training.
- The success of Healthcare Payer Enrollment Automation is evidenced by quantitative results, ranging from cost and time savings to improved accuracy — including a reduction in enrollment turnaround time from an average of 32 days to 4.5 days and in the rejection rate from 20% to 5%.

DETAILED DESCRIPTION

PNC is a leading treasury services provider in the US with 44,000 Corporate & Institutional Banking clients. Its Treasury Management business ranks in the top 4 (Ernst & Young, 2019), and it has earned client satisfaction awards.

Table 1: PNC Snapshot

| PNC BANK | |
|-----------------------------------|------------------------------|
| YEAR FOUNDED | 1845 |
| REVENUE | \$17.8 billion (2019) |
| ASSETS | \$410 billion (2019) |
| GEOGRAPHICAL PRESENCE | US |
| EMPLOYEES | Approximately 52,000 |
| OTHER KEY METRICS | Approximately 2,300 branches |
| RELEVANT TECHNOLOGIES AND VENDORS | Madaket |

Source: PNC

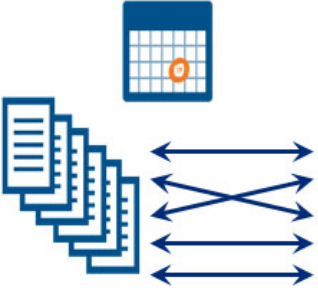
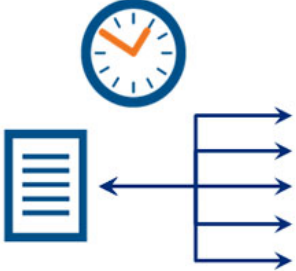
In developing Healthcare Payer Enrollment Automation, PNC is leveraging its experience working with thousands of payers and providers and running a healthcare clearinghouse.

Opportunity

The health insurance market in the US is highly fragmented with approximately 4,000 payers. To get paid by payers electronically and receive an e-remittance (aka 835), healthcare providers face the onerous task of navigating through myriad enrollment processes, which include differing requirements (e.g., for signatures) and forms across payers. As a result, the enrollment cycle time can take up to eight weeks, with payers rejecting an average of 20% of all enrollment submissions (Figure 1). Rising fraud in healthcare e-payments has compounded the complexity. While healthcare providers are striving to digitize their revenue cycle — including straight-through cash posting — this upstream step is sufficiently time-consuming, making the enrollment process less efficient.

According to the 2017 Council for Affordable Quality Healthcare Index, “even with [the] adoption of electronic claim submission at 95%, 37% of claim payments” were made manually. This created an opportunity to lower costs by more than \$9.4 billion by transitioning to electronic transactions. The bank that can unlock these cost savings stands to fortify its position in healthcare banking. PNC is helping do just that with its Healthcare Payer Enrollment Automation. Given that PNC’s core healthcare provider clients are large healthcare systems with over 5 million claims a year, PNC’s Healthcare Payer Enrollment Automation solution’s value proposition is enormous.

Figure 1: The Byzantine Traditional Enrollment Process

| | |
|---|--|
|  | <p>Pre-automation:</p> <ul style="list-style-type: none"> • Average cycle time at 32 days for EFTs and 20 days for 835 enrollments • Approximate cost per enrollment is \$360 (this was PNC's internal cost per enrollment) • No enrollment level reporting internally or for clients • Process complexity – 38 process steps and 15 decision points |
|  | <p>Healthcare Payer Enrollment Automation can help:</p> <ul style="list-style-type: none"> • Centralize enrollment data and requests • Reduce average enrollment to 3 to 5 business days • Eliminate redundant steps and re-work • Show dashboard tracking and reporting statuses • Align client self-service with digital onboarding • Reduce error rate |

Source: PNC

Solution

PNC's goal with Healthcare Payer Enrollment Automation is to help maximize healthcare providers' efficiency in enrolling payers for e-payment and e-remittance and thereby drive up their straight-through processing (STP) rates. In particular, it helps large provider entities with thousands of National Provider Identifiers (NPIs) and numerous unique signers. By automatically populating payer and provider data into the enrollment forms, this can reduce enrollment cycle time by sending error-free enrollment data directly to payers.

Shifting from a manual paper-based process to a single source of data and automation required an overhaul of PNC's internal payer enrollment and healthcare provider client onboarding processes. The new process allows it to show step-by-step who approved an enrollment. Prefilled PDFs and e-signatures add transparency and traceability that were lacking with manual enrollments. Moreover, PNC can help mitigate fraud using an automated workflow that logs each step of the enrollment and the associated user, replacing PNC's manual risk controls with systemic controls.

To develop its solution, PNC chose to work with a tech vendor, Madaket, based on its healthcare-specific SaaS and API capabilities. Madaket created new and evolved existing APIs to meet PNC's unique requirements given the existing level of service PNC delivers to clients, such as white glove service, superior technology, and extensive controls. With the support of Madaket, PNC linked the payer enrollment requirements with its provider data and created an automated workflow that addressed the needs of both payers and healthcare providers (e.g., meeting signer requirements). The workflow helps:

- Centralize enrollment data and requests.
- Eliminate redundant steps and re-work.

- Provide dashboard tracking and reporting statuses (Figure 2).
- Offer client self-service aligned with digital onboarding.
- Reduce the error rate to less than 1%.
- Provide systemic fraud controls.

To help provide a single digital experience to its healthcare provider clients, PNC leveraged Madaket APIs to integrate PINACLE (PNC’s corporate online and mobile banking portal) and Healthcare Payer Enrollment Automation into PNC Healthcare Advantage (its healthcare platform). This integrated PINACLE platform enables clients to access PNC Healthcare Advantage portal through a single sign-on and centralized entitlements. Healthcare provider clients can easily navigate between their traditional banking services and healthcare services — without having to log on to multiple systems.

PNC used Angular (an open-source web development application) to build an intuitive user experience that eliminated the need for lengthy training and user manuals. A critical part of the solution development was user testing. PNC internal developers leveraged APIs to create a real-time interactive user experience. They used InVision click-through prototypes to give healthcare provider clients and internal end-users a way to easily touch and see how the developers translated their user journey into a functioning, user-friendly interface. Gathering feedback early and often yielded positive results: There was virtually no need for post-release enhancements or bug fixes.

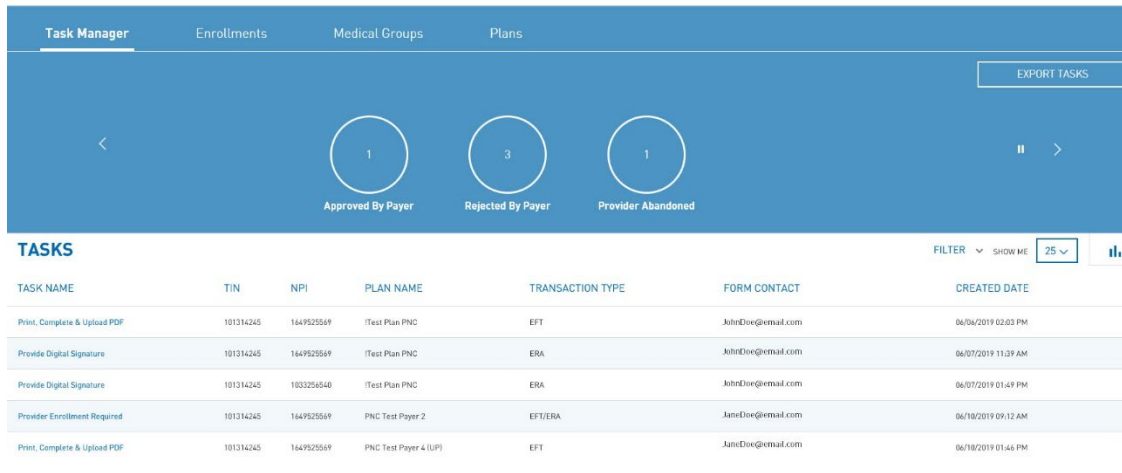
The intuitive UI is demonstrated by the screenshots below for healthcare provider clients. Figure 2 shows two screens: the healthcare provider client dashboard with key metrics displayed at the top and “tasks” to be done listed below, and the “Task Manager” page. A healthcare provider client can click on the task and go to a screen that displays the task (e.g., provide digital signature) and the remaining steps to complete. This self-service feature was added after the initial launch and evaluation of workflow improvements. Healthcare provider clients can view enrollment status, complete enrollment review, e-sign, and upload required forms.

Figure 2: Provider Dashboard and Task Manager

The screenshot displays the 'Healthcare' dashboard with the 'Enrollments' tab selected. The interface includes a navigation bar with 'Task Manager', 'Enrollments', 'Medical Groups', and 'Plans'. A header image shows healthcare professionals. A table lists enrollment records with the following data:

| ENROLLMENT ID | STATUS | MEDICAL GROUP | TIN | NPI | PLAN NAME | TRANSACTION TYPE | LAST UPDATED | OWNER |
|---------------|--------|------------------------|-----------|------------|-------------------------------------|------------------|---------------------|----------|
| 2183 | Closed | 0078 PNC Medical Group | 609709809 | 1083868772 | Aetna | ERA | about 9 day(s) ago | John Doe |
| 1917 | Closed | 0078 PNC Medical Group | 609709809 | 1083868772 | Medicare with Legacy ID | ERA | about 30 day(s) ago | John Doe |
| 1916 | Closed | 0078 PNC Medical Group | 609709809 | 1083868772 | Cigna - Training | EFT | about 30 day(s) ago | John Doe |
| 1915 | Closed | 0078 PNC Medical Group | 609709809 | 1083868772 | Aetna Better Health of Pennsylvania | ERA | about 30 day(s) ago | John Doe |

At the bottom of the table, there is a pagination control showing 'Items 1 - 4 of 4' and a page number '1 / 1'.



Source: PNC

Approach

To produce a well-designed, intuitive solution, PNC recognized that cross-team collaboration was important during design and journey mapping. In addition, PNC recognized that client input was valuable. PNC wanted to increase overall project participation and generate a sense of “skin in the game.” PNC also recognized that it would have to reengineer a complicated process and hence chose to have its crews focused on both technology and process (unlike in traditional approaches, which have a tech team and a process team). As a result, PNC began by examining best practices in electronic enrollment and then reengineered its process.

Cross-team collaboration. The project involved process changes and a number of key stakeholders and experienced team members, as well as end users — client healthcare providers, all of which contributed to its complexity. The core team consisted of 10 lead contributors (including two project managers) from PNC and two from Madaket, each focused on a specific work stream such as communications or internal training. Given that process engineering requires discipline and care, PNC assigned a manager for this stage who is certified in change management.

Providing visibility and consistent communication to the cross-team collaborators and a comprehensive project plan contributed to its overall success. Prior to kick-off, the project team met with internal stakeholders from Onboarding, Payer Services, Payer Enrollment, Technology, and Product teams to provide an overview of the project plan and ask for dedicated resources and support. As a result, teams were able to prepare for and be aware of any complexities.

During the project, PNC held biweekly project meetings and remained focused on each work stream and deliverable, no matter how small. Weekly status reports captured the project timeline, task lists, risk, and upcoming activities. This level of detail and transparency kept the team focused and on task.

The internal development crews worked closely with Madaket to align shared backlogs and overall prioritization. Through strong communication and daily stand-up meetings, they stayed aligned and worked in tandem.

Project milestones included data conversion, defining internal process and support procedures and training coordination, planning and distributing client communications, UPIC (Universal Payment Identification Code) implementation, API mapping, and user interface integration (Table 2).

Table 2: Milestones

| MILESTONE | DESCRIPTION |
|--|---|
| DATA CONVERSION 161 days | <ul style="list-style-type: none"> Establish PNC Clearinghouse setups within the Madaket system Payer Setups Pilot Phase 1 Provider Setups |
| DEFINING CRITICAL ELEMENTS 105 and 122 days, respectively | <p>Internal process</p> <ul style="list-style-type: none"> Internal Operational Processes Procedure for data integrity Define Client Support Model <p>Training internal users and Implementation Support (Payer Enrollment, Onboarding, Implementations)</p> <ul style="list-style-type: none"> Develop training content for provider setup Develop training content for payer setup Create test payers/providers in lower region |
| CLIENT COMMUNICATIONS 118 days | <p>Client Management: Planning and distributing communications</p> <ul style="list-style-type: none"> Identify Pilot Clients Introductory demos for Pilot Clients Universal Payment Identification Code (UPIC) communication (develop and distribute to clients) |
| UPIC IMPLEMENTATION 142 days | <p>For fraud protection, UPIC is used for all EFT enrollments¹</p> <ul style="list-style-type: none"> Pilot Clients setup Setups for waves 1, 2, 3 Update bank letters |
| API MAPPING & USER INTERFACE INTEGRATION 118 days | <ul style="list-style-type: none"> Development of screens API/UI mapping Historical data load Establish screen APIs Integrate UI/API Solve exceptions Establish report interface Bulk upload interface |
| GO LIVE | <ul style="list-style-type: none"> Pre-Deployment: 14 days Deploy in test environment complete validation Day one turnover Daily monitoring (PNC/Madaket) Pilot client go live with screen share so PNC can watch and answer any questions Pilot feedback collected weekly by Product Management Feedback from pilot clients provided to agile crews for mockup design |

1. PNC's goal is to help with this additional layer of protection so that its healthcare provider clients' account information is shielded during the enrollment process. Because there is no way to verify how a payer or third party stores, restricts access to, or protects banking information provided during enrollments, using UPICs block debits, adding a layer of protection against a bad actor attempting to redirect funds. The combination of UPICs with an automated traceable workflow and locked forms can help provide systemic controls for its clients.
Source: PNC

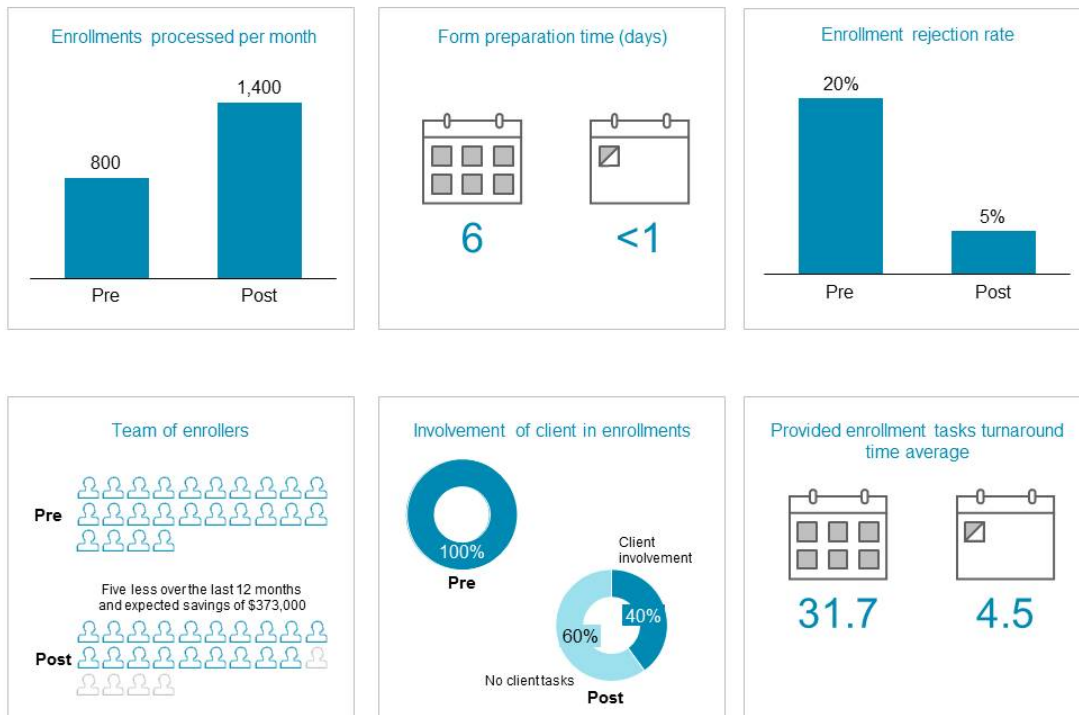
Client input is paramount. Starting the pilot with a select number of clients and payer setups provided the opportunity to identify and address potential gaps. Madaket and the internal development crews worked together to respond to feedback regarding how to help simplify the user experience. In addition, development crews anticipated new user needs and built features not originally in the core product such as bulk upload of an entire client setup, which, for a large health system, could include hundreds of locations and NPIs.

Results

PNC’s healthcare provider clients migrated to the new process in January 2019. As shown in Figure 3, PNC achieved positive operational and business results. Clients say they “love the new system” and find it “fast and easy to use.” Thanks to automation and an intuitive design, clients are reporting drastically reduced time spent on enrollment. One client reported that work that used to take an employee five hours a week to complete has been reduced to one hour. In addition, as a result of the project’s successes, PNC product delivery teams have created a model that is used consistently to support all cross-team collaboration and development.

Additional results include a decline in the amount of support tickets. Because the automated enrollment process and technology let clients view their enrollment status, the number of support tickets submitted by clients for missing data with a root cause tied to an enrollment issue has started to decline. For example, for PNC’s largest pilot client, overall support tickets related to enrollment dropped from 15% of total support tickets to 4.4% in just four months.

Figure 3: Results – Pre and Post



Source: PNC

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