



Danville, PA



Emergency  
Medicine



9 facilities



Professional +  
Facility coding



EMR: Epic EMR  
& Epic Resolute  
(for billing)

## Automating Medical Coding Across all ED locations for a Regional Health System

### The Challenge:

#### Resource-Heavy, Manual Coding Prevents Scalability

Geisinger is a regional health system that operates nine emergency departments providing access to care for those who need it most in central, south-central and northeastern Pennsylvania. To ensure that billing for ER services reflects the quality provided and complexity involved in managing patient care in emergency medicine settings, Geisinger historically performed medical coding “in-house.”

While Geisinger leveraged some technology tools for coding, its approach was largely manual. In addition to high costs, this approach also led to challenges with keeping up to date with rapidly evolving coding guidelines, as well as staffing challenges. For Geisinger, similar to other providers, COVID-19 exacerbated these challenges and, in the early days of the pandemic, it became increasingly difficult to find and retain qualified coders to meet emergency department (ED) volumes.

Recognizing the opportunity to innovate, Geisinger set out to modernize its revenue cycle management (RCM) operations, particularly its medical coding and billing capabilities. After consolidating its EMR and billing system under a single Epic platform, Geisinger identified the need for a solution that could automate its medical coding process and, simultaneously, improve its quality, speed and consistency.

### The Solution:

#### A New, Scalable Platform that Translates Clinical Language into Accurate, Compliant Reimbursement Codes within Seconds

Geisinger adopted and simultaneously deployed Nym’s autonomous medical coding engine across eight emergency departments for both professional and facility coding. Powered by explainable AI capabilities and a clinical language understanding (CLU) engine, Nym’s autonomous medical coding platform transforms provider narratives in the free text within patient charts. The Nym platform turns the clinical language into compliant ICD-10-CM and CPT reimbursement codes in a matter of seconds, with greater than 96% accuracy and no human intervention.

As part of the implementation process, Nym configured its platform to Geisinger's standard operating procedures and guidelines from payers. For the initial configuration, Nym requested some historical data from Geisinger for testing purposes, to establish a baseline of the Nym platform's coding coverage and quality. This was followed by a "shadowing" period, during which Nym and Geisinger both coded accounts daily and then compared results on a weekly basis so that adjustments could be made to the configuration as needed.

Once Nym's technology met the agreed-upon go-live criteria (96% accuracy and <12 hour turnaround time) within the shadow environment, Geisinger fully activated the Nym platform and began using it for its daily medical billing.

## The Impact:

### Medical Billing That's "Fully Automated with Unprecedented Accuracy in Just Seconds"

By the go-live date, Nym received all of Geisinger's ED medical charts daily. The ones that it could code were sent "straight to billing," without human intervention. Simultaneously, the Nym platform rerouted the incomplete and unprocessed medical charts back to Geisinger for manual coding, ensuring they seamlessly fit into Geisinger's medical coding and billing workflows. To summarize key coding statistics at the system and facility level, Nym provided Geisinger with a dashboard, as well as comprehensive audit trails with traceable codes for full transparency.



**<2.5s**  
Per Chart



**<0.1%**  
Denials



“What previously took Geisinger days and teams of people to achieve is now, thanks to the Nym platform, fully automated with unprecedented accuracy in just seconds.”

**Kevin Roberts,**

Executive Vice President and Chief Financial Officer

## About Nym

Nym Health is a leader in autonomous medical coding. Combining computational linguistics and clinical intelligence, Nym's innovative approach to revenue cycle management (RCM) is reducing costs and improving payment cycles for healthcare providers across the United States. Along with over 96 percent accuracy, Nym's technology delivers comprehensive, audit-ready, traceable codes for full transparency. The Nym platform processes over three million charts annually in more than 90 emergency department and urgent care settings.

