

# How to Increase Professional Billing Charge Capture with Healthcare Analytics



## HEALTHCARE ORGANIZATION

Small Hospitals and Hospital Systems

## TOP RESULTS

- 6% increase in notes with sufficient clinical data for billing
- Net income benefit of \$50K/month for 3 specialty areas with future expansion plans
- 25% improvement in professional coder efficiency, enabling time for provider education

## PRODUCTS

- Late-Binding™ Data Warehouse
- Workflow/Operational Advanced Application - Professional Billing Module

## SERVICES

- Installation Services
- Improvement Services



## BACKGROUND INFORMATION

North Memorial Health Care in the Northwest metro area of Minneapolis-St. Paul has provided healthcare services for more than 50 years. The health system includes North Memorial Medical Center, a Level I Trauma Center, Maple Grove Hospital, and a network of primary, urgent care and specialty care clinics. North Memorial also operates one of the largest hospital-based air and ground ambulance services in the county.

Like many health systems, North Memorial is working its way through rising costs, regional pressures from an abundance of competitors, and unpredictable reimbursement. The leadership team was looking for ways to contain cost while continuing to ensure excellence in care. In addition, the health system was having difficulty collecting and analyzing data from its myriad IT systems, leaving hospital leaders with an incomplete view of the organization’s financial pain points and opportunities for improvement.

Amid these difficult market conditions, North Memorial’s leadership decided to chart a path to sustainability. The tactics they considered all had one common

“  
**The Health Catalyst Professional Billing Application has given me another tool to make sure all revenue is captured in a timely and efficient manner.**  
 ”

Nancy Young, Manager  
 Professional Coding, North Memorial Professional Services

“We aren’t locked into a proprietary solution or a service that requires us to send data outside of our organization to be analyzed, resulting in canned reports several weeks later with outdated information. Instead, Health Catalyst gives us immediate access to our data and the flexibility to answer questions as needed.”

J. Kevin Croston, MD,  
Chief Medical Officer

thread — they relied on clinical and operational insight that could only come from aggregating data from the health system’s electronic health record (EHR) and other critical IT systems. A search for solutions to accomplish this task led to an adaptive late-binding data warehouse from Health Catalyst.

“We selected Health Catalyst in part because their data warehouse is built on an open architecture that is easily customized, giving us complete flexibility to adapt to current and future needs,” said J. Kevin Croston, MD, Chief Medical Officer at North Memorial. “We aren’t locked into a proprietary solution or a service that requires us to send data outside of our organization to be analyzed, resulting in canned reports several weeks later with outdated information. Instead, Health Catalyst gives us immediate access to our data and the flexibility to answer questions as needed.”

## CLIENT STORY FOR PROFESSIONAL BILLING

The North Memorial executive leadership team believed charge capture of professional services performed in the hospital could improve. Additionally, physicians felt the charges captured underrepresented the actual services rendered. After seeing success using Health Catalyst Advanced Applications in a variety of clinical settings throughout the hospitals, North Memorial engaged Health Catalyst to implement a data improvement process for professional billing.

Before Health Catalyst, the billing process consisted of printing rounding sheets every morning from scheduling software separate from the EHR. The coders used these sheets to identify potential patient and physician interactions. Then, the coders looked at the EHR to discover corresponding documentation that confirmed an interaction took place. The coders needed to identify if the documentation justified billing. The North Memorial professional coding staff were overwhelmed by the manual effort of identifying and capturing the professional services charges.

## TIME TO VALUE

Health Catalyst provides North Memorial with a unique approach to improving professional billing. Other vendors often recommended improved revenue capture by “cracking the whip, holding people accountable and reducing staff.” These vendors didn’t talk about improving the process or providing the tools to reduce the manual effort of work.

Health Catalyst recommends a three stage data improvement process:

- 1 Data Capture: acquire key elements, assure quality, and integrate into work flow
- 2 Data Provisioning: move data into the data warehouse, build visualizations, and general external reports
- 3 Data Analysis: interpret data, discover new information (data mining), and determine data quality

The Health Catalyst Professional Billing Application was deployed in just six weeks, automating much of the data capture previously done manually by the coding staff. Using Hospital Account Records (HAR) directly from the EHR, the coding staff can now focus on data analysis and ensuring the data is captured.

The late-binding aspect of Catalyst's data warehouse means the rounding notes are viewed by coders in near-real-time and seen in a raw form to help the team better determine when notes should be billed but lack sufficient data to justify billing. The Health Catalyst Application also helps identify revenue cycle and educational opportunities. The automated data capture allows for efficient and more complete revenue cycle analysis. In addition, the Health Catalyst system provides professional coders intuitive visuals that help optimize their workflow.

## IMMEDIATE IMPROVEMENT

Health Catalyst showed North Memorial Hospital immediate improvement in the professional services billing process:

- 6% increase in notes with sufficient data for billing
- Net income benefit of \$50K/month for just 3 specialty billing areas
- 25% improvement in professional coder efficiency, enabling time for provider education

North Memorial was able to identify workflow challenges and confirm or refute assumptions about those challenges using LEAN methodologies. Having the data called out the inordinate amount of manual work coders were doing and provided the team more time to analyze the data. The result was to lower the cost of gathering the data as well as improved job satisfaction for the professional billing services staff.

## WHAT'S NEXT

North Memorial Hospital's leadership continues to use Health Catalyst platforms for clinical and financial improvements. North Memorial has hired additional staff to expand the program from the original three specialties - Heart and Vascular Institute (HVI), Hospitalists and Gastrointestinal (GI) - to three additional units with plans to deploy system-wide. They are trained up on this process and will expand the coders' ability to see if a note has already been analyzed, further reducing waste.

In addition, the ability to see when and how a billing opportunity is lost means providers can be educated to shrink unbillable services, to accurately reflect patient acuity in order to receive the accurate increased reimbursement level, and to provide sufficient information to justify billing. North Memorial Hospital has empowered its staff by putting data into the hands of the right people with the ability to fix the problem. ⚡

## ABOUT HEALTH CATALYST

Health Catalyst is a mission-driven data warehousing, analytics, and outcomes improvement company that helps healthcare organizations of all sizes perform the clinical, financial, and operational reporting and analysis needed for [population health](#) and [accountable care](#). Our proven enterprise data warehouse (EDW) and analytics platform helps improve quality, add efficiency and lower costs in support of more than 50 million patients for organizations ranging from the largest US health system to forward-thinking physician practices.

For more information, visit [www.healthcatalyst.com](http://www.healthcatalyst.com), and follow us on [Twitter](#), [LinkedIn](#), and [Facebook](#).