

# Increasing Analytical Capabilities for Utilization Management

***“We knew Byte Sized Solutions had successfully done claims analysis before and felt they could seamlessly integrate with our team to get this project done quickly and accurately. They provide a safe set of hands when it doesn’t make sense to hire extra full-time resources for a short-term project.”***

**—TJ Elbert  
Director Value Base Care  
Analytics, Northwestern  
Memorial HealthCare**

## Background

To remain at the leading edge of healthcare, Northwestern Medicine is exploring new ways to collaborate across the health system enterprise to increase efficiency and elevate the quality of care. Northwestern Medicine Physician Partners (NMPP) is a population health management program built on the foundation of a shared physician-hospital platform, and designed to meet the future demands of healthcare through collaboration and leadership.

## The Challenge

Health care providers generate and collect an enormous amount of data. One of the biggest challenges is being able to aggregate all this information in a useable way that will inform treatment decisions and ensure the highest quality of care for patients.

NMPP is looking to gain deeper insights from their data, which comes unorganized from a number of disparate sources and not in the form they need in order to transform it into actionable information. NMPP approached Byte Sized Solutions to build a SQL Server Analysis Cube to help them normalize, curate and key up targeted information so they can improve their data analysis capabilities.

## The Solution

- Extract, transform, load and normalize financial claims data from: Medicare SSP, BCBS Exchange Products, ACO Cigna and BCBS ACO
- Continuously monitor the health and quality of data and identify any issues that arise
- Developed a SQL Server Analysis Cube to facilitate analysis of cost and utilization data

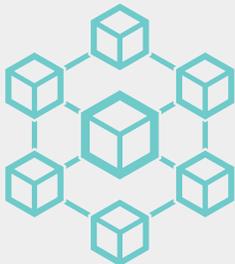
## Why Byte Sized Solutions

Byte Sized Solutions brought the technical knowledge to be able to develop a cube as well as the industry expertise to work with health care data.



## Goals

- Gain greater confidence that patient data is standardized and reliable
- Enable NMPP to pull analytics and reports to improve their business intelligence
- Identify patient trends; know where patients are going for their care and how they are spending their health care dollars
- Increase patient engagement; create new analytical tools that better target communications and health care reminders
- The cube will help evaluate the effectiveness and completeness of their utilization management program.
- Greater insight into resourcing will allow them to address shortfalls in service needs, identify ways on how to grow their revenue and help to control costs.
- Track ACO quality agreement metrics



## SQL Server Analysis Cube

provides new data analysis capabilities to help improve patient outcomes and to help control costs.

## Early Wins

- NMPP has identified payer data issues that will allow them to fine tune their payer contract negotiations.
- When signing on a new payer they now have a standardized data format that they can request; allowing for shorter implementation times in the future.
- NMPP has already put their new data analysis capabilities to work. They just completed an in-depth analysis of their emergency room utilization and spend. By identifying ER “frequent flyers” and patients with ambulatory sensitive conditions they have been able to funnel patients back into their primary care and urgent care facilities. In addition, care managers can track patients with chronic conditions and help them stay connected to their primary care physicians, arrange appointments and if necessary send social workers to do in-home visits. By harnessing new data capabilities NMPP is improving patient outcomes while cutting down on emergency room visits.

To learn more about how Byte Sized Solutions can help you, please contact us at 321.430.0502 or [sales@bytesizedsolutions.com](mailto:sales@bytesizedsolutions.com)