

# **HEALTHCARE ANALYTICS**

#### In this issue:

Advantages of Azure Data Analytics in healthcare

#### **Use Cases**

- Revenue Cycle Management
- Population Health

# Azure Data Analytics in the Healthcare

The healthcare industry has traditionally been data-intensive, with patient data being one of the most important assets for healthcare providers. The emergence of digital health technologies has increased the volume, variety, and velocity of healthcare data, making it more challenging to extract meaningful insights. Azure Data Analytics is a powerful tool that can help healthcare organizations manage and analyze this data, unlocking new insights to improve patient care and financial performance.

#### Introduction

In this issue, we will explore the benefits of Azure Data Analytics in the healthcare industry, focusing on its use in revenue cycle management and population health.

#### **Azure Data Analytics in Healthcare**

Azure Data Analytics is a suite of cloud-based tools that can help healthcare organizations collect, store, process, and analyze large volumes of data from various sources. With Azure Data Analytics, healthcare organizations can gain insights into patient behavior, clinical outcomes, financial performance, and other key metrics. Some of the key features of Azure Data Analytics that are particularly relevant to healthcare include:

February 20, 2023



- 1. **Scalability:** Azure Data Analytics can handle large volumes of data from various sources, making it suitable for healthcare organizations that generate vast amounts of data.
- 2. **Data security:** Healthcare data is sensitive and must be handled with care to protect patient privacy. Azure Data Analytics provides robust security features, including data encryption and access controls, to keep data safe.
- 3. Integration with other tools: Azure Data Analytics integrates with other Azure services, as well as third-party tools, to provide a seamless experience for users.



# **Use Case: Revenue Cycle Management**

Revenue Cycle Management (RCM) is a critical process in healthcare that involves managing the financial aspects of patient care. RCM includes activities such as patient registration, insurance verification, claims submission, and collections. RCM is a complex process that involves many stakeholders, including patients, providers, and payers. Azure Data Analytics can help healthcare organizations optimize their RCM processes by providing insights into key performance indicators, such as claims denial rates, days in accounts receivable, and net collections.

One example of how we use Azure Data Analytics in RCM is to identify and resolve claims denials. Claims denials occur when a payer rejects a claim for reimbursement. Denials can be caused by various factors, including coding errors, incomplete documentation, and eligibility issues. Denials can result in significant revenue losses for healthcare organizations if not addressed promptly. Azure Data Analytics can help identify the root causes of denials by analyzing claim data and identifying patterns. Providers can then use this information to address the issues and resubmit the claims for reimbursement.

#### The benefits of using Azure Data Analytics in RCM include:

- 1. **Improved cash flow:** By reducing claims denials and days in accounts receivable, Azure Data Analytics can help healthcare organizations improve their cash flow.
- 2. Increased efficiency: By identifying and addressing RCM issues quickly, providers can streamline their workflows and reduce administrative costs.
- 3. Enhanced revenue: By optimizing RCM processes, healthcare organizations can increase their revenue and profitability.

## **Use Case: Population Health**

Population health management (PHM) is a strategy for improving the health outcomes of a defined population. PHM involves a range of activities, including risk stratification, care coordination, and

2

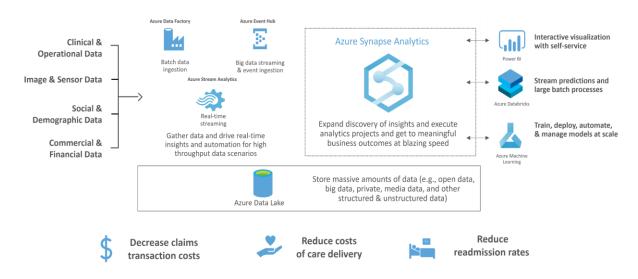


patient engagement. Azure Data Analytics can help healthcare organizations implement a successful PHM program by providing insights into population health trends, identifying high-risk patients, and tracking outcomes.

One example of how we've used Azure Data Analytics in PHM is to identify patients at high risk of hospital readmissions. Hospital readmissions are a major contributor to healthcare costs and can be harmful to patient outcomes. By analyzing patient data, including clinical and demographic data, Azure Data Analytics can identify patients who are at high risk of readmission. Providers can then intervene proactively, such as by providing additional care coordination, to prevent readmissions.

The benefits of using Azure Data Analytics in population health management include:

- 1. **Improved patient outcomes:** By identifying high-risk patients and intervening proactively, healthcare organizations can improve patient outcomes and reduce the likelihood of hospital readmissions.
- 2. **Cost savings:** By preventing readmissions and reducing unnecessary care, healthcare organizations can reduce costs and improve the efficiency of their operations.
- 3. **Better population health management:** By providing insights into population health trends, Azure Data Analytics can help healthcare organizations identify areas of focus for their PHM programs and improve the overall health of their patient populations.



# **Clinical Analytics Architecture**

## Conclusion

Bottega Data Azure Data Analytics consulting services help healthcare organizations manage and analyze large volumes of data from various sources, unlocking new insights to improve patient care and financial

3

Bottega Data | Proprietary & Confidential © 2023 | 402 W Broadway, Ste. 400, San Diego, CA 92101 © 2023 Bottega Dara LLC. All rights reserved. Azure is a trademark of Microsoft Corporation. All other trademarks are property of their respective owners This data sheet is for informational purposes only. BOTTEGA DATA MAKES NO WARRANTIES, EXPRESS OR IMPLIED, IN THIS SUMMARY.



performance. The use of Azure Data Analytics in RCM and PHM can help healthcare organizations optimize their operations, reduce costs, and improve patient outcomes. By leveraging the features of Azure Data Analytics, healthcare organizations can gain a competitive advantage in the rapidly evolving healthcare industry, delivering better care to their patients and achieving greater financial sustainability.

To learn more about our Azure Data Analytics Services for Healthcare:

URL: <u>Bottega Data</u> Phone: +1 (877) 207-4476 Email: info@bottegadata.com

4

February 20, 2023