

A hand holding a stethoscope is the central focus, set against a dark blue background. Overlaid on the image is a glowing neural network with red nodes and white lines, positioned over a faint brain scan. The overall aesthetic is futuristic and medical.

snp technologies inc.

**Unlocking business-changing
insights for intelligent
healthcare**

Executive Summary

Healthcare organizations are facing an increasing pressure to transform themselves to deliver a seamless patient experience, optimize care delivery, and address growing fraud concerns. Every healthcare organization is capable of this transformation but needs to embrace a data-driven approach to operations, processes, and technology.

However, aside from a few companies, most are limited by the ability to effectively use their data due to legacy on-premises infrastructure, siloed data, and lack of skills. These challenges often mean that companies are only able to use a fraction of their data for analysis.

This book shares how Microsoft's Azure Synapse Analytics and Power BI provides an analytics continuum to healthcare organizations, empowering them to process a tsunami of data in near real time and deliver actionable insights to improve clinical analytics, compliance analytics, and cost-based analytics.

Finally, this book gives you the best way to get started with SNP Technologies for transforming your company into an insights-driven business.

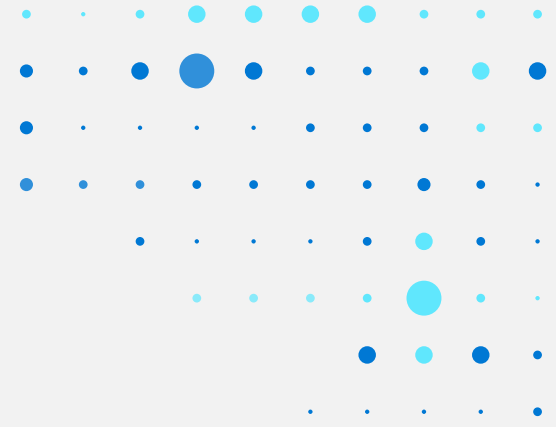
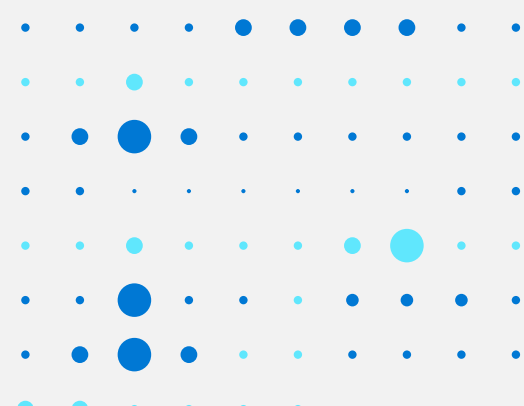


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Healthcare is evolving. Your data platform needs to evolve too

Today, healthcare organizations are under even a greater pressure to transform themselves due to trends such as increasing patient expectations, aging population, increasing costs, healthcare worker burnouts, and data security challenges.

81% of patient are unsatisfied with their current healthcare experience.¹

Currently the global health industry loses **\$6.2 billion per year** to data breaches, putting patients at risk and straining already tight budgets.²

By 2030, providers will suffer from a projected shortage of **18 million workers** worldwide.³

By 2050, this will cause the number of people aged 60 or over to more than double - from **900 million to 2 billion**, representing an increase from **12% to 22%** of the population.³

Healthcare organizations need to adapt quickly, while continuing to provide quality care to patients, to address these threats. 70% of hospital executives healthcare executives agree that keeping up with trending technologies not only gives them a competitive advantage, but is essential to growth and a positive customer experience.

At the heart of this transformation lies data and the ability to generate analytical and predictive intelligence from it. Unfortunately, for most healthcare firms, their current systems aren't open or designed for data-intensive operations and agile evolutions. They are often rigid and create silos that prevent companies from unlocking the insights hidden in that data.

Between both business processes and technology, healthcare organizations need a consistent and holistic approach to data—including everything from how they manage data to how they distribute insights to employees. Only with a consistent approach can they scale efficiently, and enable agile transformation. Finally, their business executives must be fully committed to developing and sustaining a strategic, data-driven culture.

Sources:

1. [GE Healthcare Camden Group: The Current State of Patient Experience](#)
2. [Digitization of Healthcare, Cisco](#)
3. [Global strategy on human resources for health: Workforce 2030, WHO](#)



Unlock growth and exceptional customer outcomes with a powerful analytics solution

Microsoft Azure brings the best of analytics and is the only cloud provider to bring the capabilities of data unification and limitless analytics together, enriched with the power of AI and ML, all in a single management workspace with common security and governance.

85% of organizations leveraging Azure Analytics + Power BI report measurable benefits from having well-integrated analytics databases and storage, data management stack, and BI tools.¹

Source:

1. [The Total Economic Impact of Microsoft Azure Analytics with Power BI, Forrester](#)

Key solutions enabled by Azure Synapse Analytics and Power BI

01 Clinical analytics

Healthcare workers are having to meet significant challenges to best serve patients and adapt to a rapidly evolving industry. Clinical analytics acts like a crystal ball, enabling firms to process patient data across medical devices, electronic medical records, population demographic, etc. and discover insights, suggest actions, identify correlations, associate symptoms with diseases and recommend treatment protocols.

Modern data science enables clinicians to determine the likelihood of disease and helps with determining diagnoses and predicting future wellness or illness, helping organizations improve the quality of healthcare and reduce the costs of care.

60-70% of time spent by healthcare providers looking for insights is wasted on data ingestion and 41% of providers say challenges with data and analytics to accurately estimate costs is preventing them from succeeding in value-based care models.

Delivering clinical analytics offers several strategic advantages:



For providers

Clinical pathway prediction

Assess and predict which treatment option will likely produce the best outcome for a patient.

Drug effectiveness

Predict which drug will produce the best outcome for a patient.

Disease progression prediction

Predict the likely path and progression of a disease.



For payors

Health risk prediction

Predict the likelihood that a patient presenting a certain set of symptoms is at risk for an adverse health event.

Predictive risk scoring

Assess which patients might be at risk for readmissions and hospital-acquired infections.

02 Compliance analytics

While advances in healthcare IT are currently promising, concerns about compliance make some healthcare organizations anxious about adopting modern technology solutions. Meeting compliance obligations in a dynamic regulatory environment is complex. Many health organizations need to take inventory of their data protection risks to manage the complexities of implementing controls, staying current with regulations and certifications and reporting to auditors.

The average cost of a healthcare breach is \$7.13M. On an average, it takes the healthcare industry 236 days to identify a breach and 93 days to contain a breach – nearly two months longer than other industries, as per [IBM](#).

Delivering compliance analytics offers several strategic advantages:



Assess and manage compliance risk

Prevent incidents that could disrupt patient care and processes with a comprehensive approach to data governance and compliance.



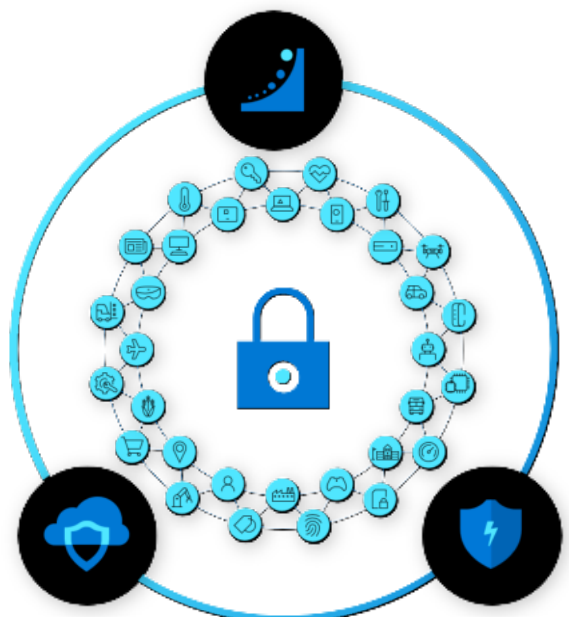
Proactively guard against threats

Monitor servers, networks, and applications to detect intrusions and prevent attacks.



Control and protect confidential health information

Improve the security of PHI data, both at rest and in transit, without encumbering clinicians.



03 Cost-based analytics

Most organizations are today operating on razor-thin margins. In many countries, the cost of providing and paying for care is rising faster than reimbursements are increasing. Cost-based analytics can evaluate and improve the efficiency of major systems used in providing health and medical service.

According to Becker's Hospital Review, many hospitals will fail or seek a partner for M&A to survive with depleted reserves and days cash on hand quickly dwindling.

Delivering cost-based analytics offers several strategic advantages:



For providers

Staffing optimization

Match staffing requirements – typically the largest single cost – to the current and future mix of patients.

Supply cost management

Evaluate which supplies are most cost-effective.

Throughput management

Optimize the flow of patients through facilities – typically the second highest cost for providers.



For payors

Shorter patient stays

Predict lengths of stay for covered services to estimate and minimize costs.

Claims management

Predict which claims will be denied, reducing the number of denials and the cost of managing them.





Unlock your data-driven transformation on Microsoft Azure with SNP Technologies Inc.

SNP Technologies Inc. and Microsoft have been strategic partners for over a decade, delivering innovative solutions that help customers harness the power of cloud by delivering tangible business results on the Microsoft platform ensuring our customers have the insights, agility, scalability and security they need to transform their business.

As an established Gold partner, SNP Technologies Inc. supports the Microsoft vision to enable digital transformation for the era of an intelligent cloud and an intelligent edge and empower every person and every organization on the planet to achieve more.



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Take the first step with a 4-Week Microsoft Azure Analytics Assessment

Gain an in depth understanding of the opportunities available in your environment to improve productivity, reduce cost and optimize investments.

In this assessment, we will provide a hands-on consulting engagement, in which we will first understand your current data infrastructure and then share how you can leverage the Azure Data Estate (Azure Synapse, Power BI, Azure Data Factory, and Azure Data Lake) to design a scalable, secured and high performing data platform and BI system.

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Website



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Our delivery process



Discover

Understand your data estate to identify the scenarios where Power BI with Azure Synapse can be leveraged.



Brief

Provide an overview of the Azure Data Estate and how you can leverage it to design a scalable, secured, and a high performing data platform and BI system.



Next steps

Provide the roadmap to a proof-of-concept and subsequently a final implementation.