

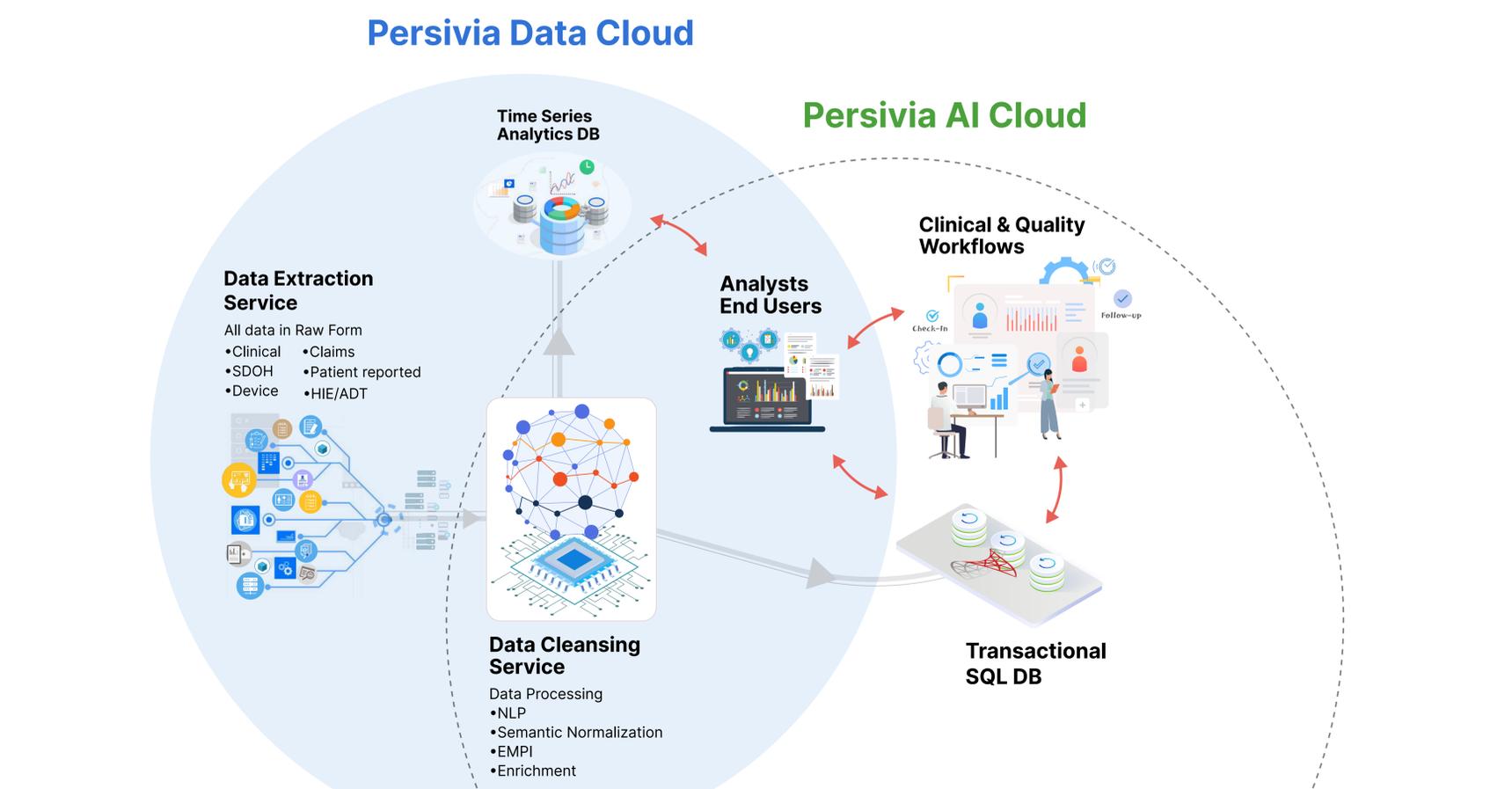
Persivia's Health Data Management Platform:

A Cure for Healthcare Data Woes

Executive Summary

In an era where healthcare data is expanding at an unprecedented rate, the need for effective data management solutions has never been more critical. Persivia's Health Data Management Platform, CareSpace®, is designed to navigate this complex landscape, offering a comprehensive suite of tools to aggregate, integrate, and analyze diverse health data sources.

This whitepaper explains the key features of CareSpace®, including its advanced data fabric, data lakehouse, and interoperability capabilities. By leveraging cutting-edge technologies such as AI and Natural Language Processing, Persivia empowers healthcare organizations to improve patient outcomes, enhance operational efficiency, and support population health management. With a focus on seamless data exchange and real-time insights, CareSpace® helps healthcare providers manage and utilize data, ultimately leading to more informed clinical decisions, financial gains and better patient care.





Introduction

[According to Gartner, poor data quality costs organizations an average of \\$12.9 million annually.](#) Imagine a world where a doctor knows exactly what's going on with a patient's health, like a mind reader, but better. That's the healthcare revolution we're heading towards, powered by a tidal wave of patient data. But right now, it's more like trying to build a sandcastle while the tide's coming in - the sheer volume and complexity of healthcare data can easily overwhelm even the most advanced systems.

Turning Challenges into Opportunities

This data explosion brings both exciting possibilities and significant hurdles. For individuals and organizations, there's a real risk of being overwhelmed by information. At the same time, we need to tackle important issues around managing, ensuring quality, and protecting all this data. One of the biggest concerns is providing the data is accurate and reliable. It's equally crucial to protect it from security breaches and unauthorized use. Another big task is dealing with the many different types of data. We have structured data (like numbers in a spreadsheet), semi-structured data (like email), and unstructured data (like free-form text). Each type needs to be handled differently to get valuable insights. This data comes from all sorts of places - video chats with doctors, phone calls with specialists, health app trends, social factors affecting health, and readings from medical devices, to name just a few.

Healthcare is always changing, with new treatments, medicines, and discoveries happening constantly. This means we're seeing more and more new types of important data, and it's happening faster than ever before. Persivia recognizes these challenges and has developed a holistic approach to creating a data-driven healthcare ecosystem that addresses these issues head-on.

Enter Persivia CareSpace®

With 20 years of extensive experience in the healthcare technology sector, Persivia has established itself as a trailblazer in health data management. This wealth of expertise has been meticulously channelled into the development of CareSpace®, a comprehensive and cutting-edge digital health platform. This deep industry knowledge, combined with a relentless focus on solving complex healthcare data challenges, has positioned CareSpace® as the go-to solution for healthcare organizations seeking to make the most of their data assets. Persivia CareSpace® platform sets the gold standard in health data management, offering **Standards Based, Code System Agnostic, Designed for Quick Integration.**

Here's a detailed look at how Persivia excels in each critical area:

1. Data Aggregation and Integration

Picture this: A hospital has data coming from everywhere – EHRs, EMRs, clinics, claims data, devices, etc. Persivia CareSpace® is like a master collector, ingesting data from over 3000 different data sources. It's breaking down walls between data silos faster. The result?

A complete picture of each patient's health, all in one place. CareSpace® aggregates data from disparate sources such as **EMRs, HIEs, HRAs labs, claims data, SDOH, HL7 data, patient reported data, consumer data, diagnostic device data to build a single longitudinal patient record.** This ensures a unified view of each individual's health journey across the entire care continuum.

CareSpace® stands out for its ability to handle an extensive range of file formats and types, including **HL7 V2 & V3, Clinical Document Architecture (CDA), Consolidated CDA (CCDA) ADT, Payer (CCLF, BPCI, X12, 837, Attr., MOR etc.), CSV, Flat file, HL& FHIR, QRDA, USCDI.**

2. Data Fabric

Over the past 20 years, Persivia has developed a sophisticated data fabric that includes a variety of high-quality data catalogs and semantic sets. This fabric encompasses quality, clinical, and value-based care metadata, to provide actionable insights. By leveraging this data fabric, Persivia has created hundreds of AI models that assist organizations in reducing costs, enhancing care, and significantly increasing efficiency.

3. Data Lakehouse

Persivia's data Lakehouse goes beyond traditional data storage:

- Supports storage and querying of a comprehensive Unified Data Model
- Enables real-time data processing and analytics
- Facilitates seamless integration of structured and unstructured data
- Provides a flexible foundation for AI and machine learning applications

This modern architecture ensures that CareSpace® can handle the ever-increasing volume and complexity of healthcare data while maintaining high performance.

4. Data Integration Module

The data integration module from Persivia features:

- High-precision Natural Language Processing (NLP) to extract clinically relevant coded data from text and unstructured notes.
- Accurate Patient Record Consolidation with Persivia's Enterprise Master Patient Index (eMPI)

To reliably consolidate data into comprehensive longitudinal patient records, CareSpace leverages Persivia's proprietary Enterprise Master Patient Index (eMPI). This advanced system employs a multi-layered approach to patient identification:

- a. Primary Matching:** The eMPI matches on unique identifiers like Social Security Number and Electronic Health Record Medical Record Number to accurately link data to the correct patient record.
- b. Secondary Matching:** Specific patient demographic fields are used as additional criteria to enhance the matching process.
- c. Potential Duplicate Flagging:** Proprietary weighting and probabilistic algorithms are applied to flag potential duplicate records for further review.

5. Advanced Interoperability and Data Exchange

CareSpace® has successfully integrated data from over 500 different healthcare systems, dismantling silos and providing a unified view of patient health. The platform's advanced interoperability capabilities facilitate seamless data exchange among various systems, addressing one of the primary challenges in healthcare data management

6. Rigorous Data Quality & Continuity Assurance

Persivia sets the bar for data quality in healthcare:

- Continuous monitoring of hundreds of data feeds
- Real-time quality checks across millions of messages and files
- Automated data validation and cleansing processes
- Comprehensive data lineage tracking and audit trails

These robust quality assurance measures ensure that healthcare organizations can trust the integrity and reliability of their data for critical decision-making.

7. Compliance and Interoperability

Persivia's commitment to data security and privacy is validated by its HITRUST Implemented, 1-year (i1) certification. This gold standard certification in the healthcare industry ensures that CareSpace® employs a comprehensive set of curated controls to protect against current and emerging threats. Our platform maintains the highest standards of data security, patient privacy, and regulatory compliance, including

- Full FHIR (Fast Healthcare Interoperability Resources) compliance, enabling seamless data exchange
- HITRUST certification, demonstrating the highest standards of data security and privacy
- USCDI (United States Core Data for Interoperability) compliance, ensuring standardized data formats

Proven Outcomes

8-12 weeks

Quickest Time-To-Value

65%

Reductions in Hospital
readmissions

85%

Increase in operational
efficiency

90%

Accuracy in predicting high-cost
cohorts through ML based
Predictive Modelling

98%

Accuracy in extracting HCC
codes from physician Notes
through NLP

Conclusion

The future of healthcare is data-driven, and CareSpace® is leading the charge. As we've seen, the potential for improved patient outcomes, operational efficiency, and cost savings is immense. The question now is not whether to embrace comprehensive data management, but how quickly your organization can implement it. Take the next step towards transforming your healthcare delivery. Explore how CareSpace® can revolutionize your data management strategy and let you have complete control over your healthcare data.

Contact Persivia today for a personalized demonstration and discover how you can be at the forefront of the healthcare data revolution.

Remember, in the rapidly evolving world of healthcare, those who utilize the power of data today will be the leaders of tomorrow. Don't just manage your data—let it drive your success with CareSpace®.

Gartner® recognizes Persivia in the Market Guide for Health Data Management Platforms;

[click here](#) to learn more