



ecosystem



THE STATE OF ANALYTICS & INTEROPERABILITY STUDY

# Healthcare Organisations are Struggling with Harnessing the Power of Data

AUTHORED BY

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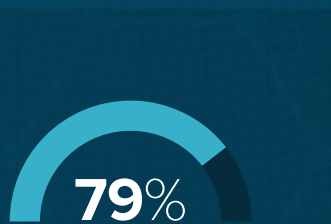
Healthcare organisations have access to enormous volumes of data assets from multiple and disparate sources, that can be harnessed to improve clinical and patient outcomes. But despite the huge progress made in healthcare IT in recent years, healthcare organisations continue to struggle with the collection, analysis, and application of data to make timely decisions.

This inaugural survey of healthcare executives in Australia & New Zealand highlights what they have to say about their key data management and analytics challenges.

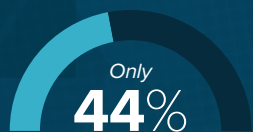
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# Executive Summary

Two years of constant disruption has seen an immense push for Healthcare to transform.



of healthcare organisations have analytics either intrinsic to all business decisions or as a top priority



of key executives trust the data fully



have a holistic digital transformation strategy



want their organisations to focus more on standardisation of data exchange

It has transformed in parts – in its reliance on technology and the shift in attitude both in how clinicians deliver care and how patients want to access healthcare services. There has been an acceleration in the adoption of new processes and care models. The volume of patient data available to a healthcare organisation has also increased exponentially.

**Data lies at the epicentre of digital transformation and innovation; and healthcare organisations across Australia and New Zealand (ANZ) see data and analytics as a key organisational priority.**

**But key stakeholders in healthcare organisations in the region simply do not have enough trust in the data.**

Unless healthcare organisations resolve this conflict, they run the risk of squandering one of their most important assets and hindering their larger objective of finding affordable ways to achieve better patient and clinical outcomes.

A new study that sought feedback from 180 healthcare executives in the region, conducted by tech research and advisory firm, Ecosystem and commissioned by InterSystems – a global leader in providing next-generation solutions for enterprise digital transformations – finds that leaders continue to face significant challenges in harnessing the power of data.

The primary challenge is the lack of a holistic data strategy. Despite their best intentions, healthcare organisations are unable to bring together and analyse data across multiple sources and give access to seamless, real-time, actionable clinical and operational insights to key decision-makers.

**Healthcare leaders want to resolve this conflict – they are demanding a change in the interoperability environment that will allow them to achieve their objectives.**

# Building Data Synergy to Resolve Conflicting Demands in Healthcare

The key business priorities of healthcare organisations in ANZ reveal conflicting demands – they have to improve clinical outcomes while reducing cost; and through it all, they must ensure compliance with a growing number of government mandates.

**We would like to track patient outcomes through the entire journey for the hospital's performance analysis.**

Senior Management  
Executive of a Public  
Hospital in Regional South  
Australia

A data synergy, where data assets are managed holistically and where data from multiple sources interact in real time, allows key healthcare stakeholders to make informed decisions to achieve these conflicting demands.

## TOP 3 BUSINESS PRIORITIES OF HEALTHCARE ORGANISATIONS IN ANZ FOR 2022-23

**64%**



Compliance with government mandates

**46%**



Cost optimisation

**42%**



Improving clinical outcome

*Question: What are the organisation's 3 main business priorities for 2022-23?*

## Organisations want to unlock the data and its true value

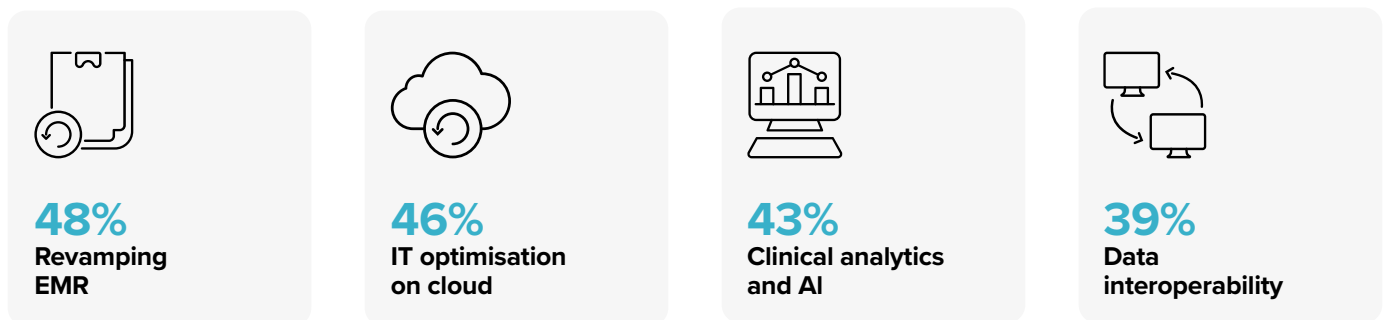
Healthcare organisations in ANZ have taken the first step towards building data synergy. 78% of the organisations place a high importance on analytics to achieve all their business priorities – not just operational efficiency or improving clinical outcomes.



Question: How important is analytics to your business priorities?

They also understand the importance of data-led transformation. They are looking to reap the benefits of their investments in EMR systems through revamping initiatives. They are adopting cloud infrastructure and software for the much-needed scalability and to make data accessible across the organisation. A smaller percentage of organisations are prioritising data interoperability to empower them to bring all the data together to unlock its full value.

## TECH PRIORITIES ARE ALIGNED TO ORGANISATIONS' BUSINESS PRIORITIES



Question: What are the organisation's 3 main technology focus areas for 2022-23?

**The analytics solution should help the hospital to understand what treatment protocol will work best for each patient and how to provide it at the lowest cost.**

Clinical Executive of a Public Hospital in Metropolitan South Australia

## Patients are at the core of analytics investments

Ultimately the biggest benefit of healthcare data is to improve clinical outcomes and patient experience – both of which lie at the core of value-based healthcare. As health expenditures continue to rise, organisations have to deliver those outcomes while optimising costs. The key outcomes that organisations expect from their analytics investments show a clear shift in mindset towards value-based healthcare in ANZ – improvement of clinical and patient outcomes at an optimised cost.

### MAIN OUTCOMES EXPECTED FROM ANALYTICS SOLUTIONS



Question: What are the 3 main outcomes expected of analytics solutions?

### WHAT EXECUTIVES WANT FROM HEALTHCARE ANALYTICS



Question: What are your expectations from a robust healthcare analytics solution?

# Despite the Best Intentions, Why are Healthcare Organisations in ANZ Underutilising Data?

#1

**More than 50% of the key stakeholders do not trust the data fully**

In a healthcare organisation, the people who manage and leverage the data most are part of the IT, clinical and operations teams. The adoption of analytics by these key users depend on how much they trust the data and think it can benefit their ability to perform their jobs and improve clinical and operational outcomes.

## KEY STAKEHOLDERS' TRUST IN THE ORGANISATION'S DATA



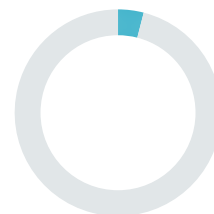
**44%**  
We have full trust in the data



**37%**  
We have some trust in the data



**14%**  
We are unsure of the data quality



**4%**  
We do not trust the data at all

*Question: How would you rate the level of trust in the data quality used by the organisation?*

“

## ECOSYSTEM OPINION

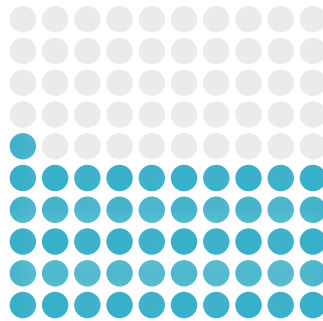
**The trust in the data is intrinsically linked to data quality and data access. Healthcare providers want access to the right data, at the right time, and in the right format, irrespective of the source.**

## #2

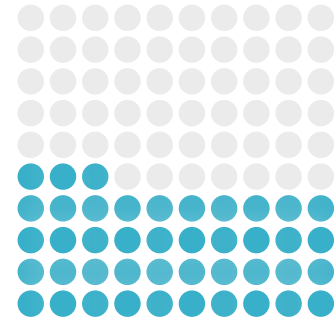
## Data quality and access limit success

Trust in data is a function of the data quality. Ensuring data quality requires a data-driven organisational culture where the people and processes are focused on accuracy across the data value chain; consistency across disparate data sources; and real-time access to the data. Organisations are challenged by their inability to share real-time data; by the lack of a single source of truth for all data; and in integrating disparate enterprise systems for a seamless data exchange.

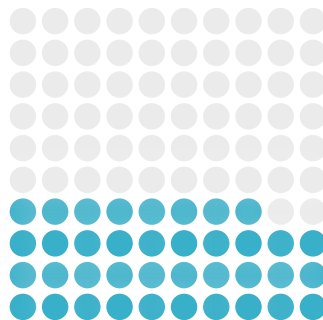
### KEY DATA CHALLENGES OF ANALYTICS DEPLOYMENTS



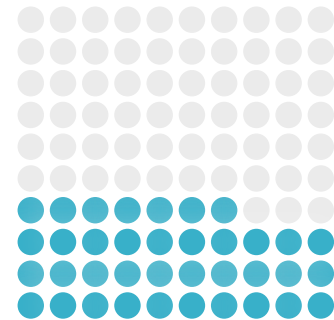
**51%**  
Data quality



**43%**  
Inability to access real-time data



**38%**  
Lack of a central data repository



**37%**  
Integration of analytics solutions with other systems

*Question: What are the top 3 data challenges in implementing a successful analytics solution?*



### ECOSYSTEM OPINION

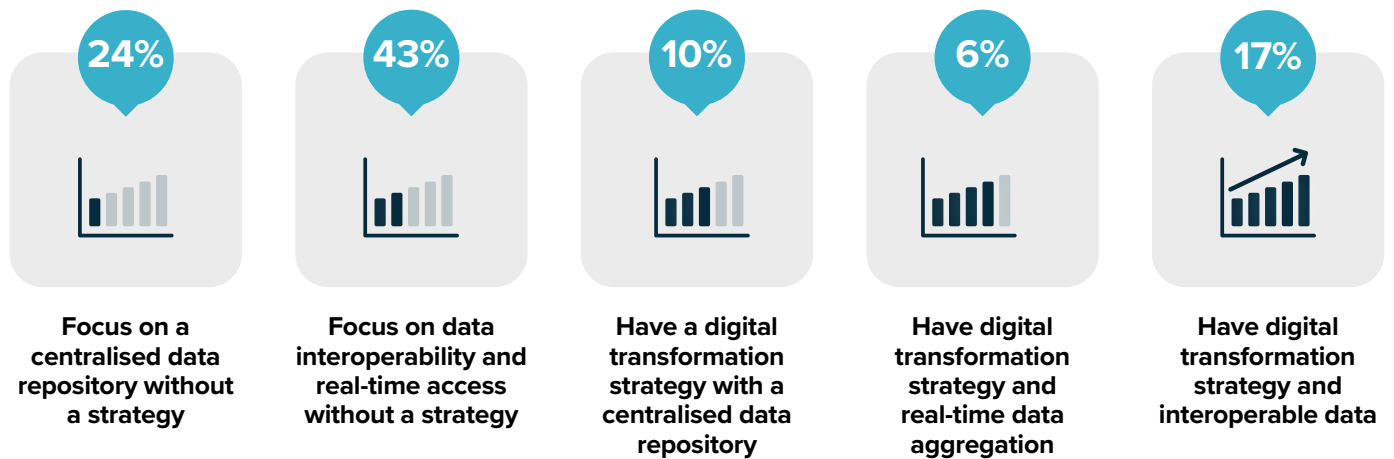
**A holistic digital transformation strategy that includes considerations such as data governance and interoperability can mitigate these challenges.**

## #3

## Organisations' data strategies may be obsolete

Ideally, even before organisations start their data investments, they should have a digital transformation strategy that is holistic, scalable, and allows data leverage across multiple functionalities. But the truth is that every healthcare organisation has been on a data journey long before they felt the need for a strategy to back it up. Now is the time to re-calibrate and re-evaluate the data strategy of the organisation. Only 33% of organisations in ANZ have an underlying digital transformation strategy.

### MATURITY OF HEALTHCARE ORGANISATIONS' DATA STRATEGY IN ANZ



*Model based on response to multiple questions, ongoing Ecosystem research and analyst's market insights*



#### ECOSYSTEM OPINION

**The data strategy should go beyond building a central repository – it should include data governance policies to maintain accuracy and incorporate data interoperability for real-time access across all stakeholders.**

## #4

## Organisations analyse limited data

Healthcare organisations generate and manage enormous volumes of data. The truth however is that healthcare organisations in ANZ are limited in the number of datasets that they are able to analyse – primarily because the multiple datasets are not interoperable and cannot interact. Clinicians make decisions on clinical and patient outcomes with only a fraction of the total data that the organisation has access to.

**Analytics should allow a multi-dimensional approach to wellness.**

Clinical Executive of a Public Hospital in Metropolitan South Australia

### DATA ANALYSED BY ANZ HEALTHCARE ORGANISATIONS

52%



In-patient clinical data

41%



Data from diagnostics systems

38%



Patient administration data

34%



Clinical data from out-patient services

24%



Text from communication systems (e.g. email, forms, etc)

23%



Log files (access information)

18%



Sensor/ device data

*Question: What data is used in the analytics solutions in the organisation?*

“

### ECOSYSTEM OPINION

**The biggest barrier to having this multi-dimensional approach to decision-making is the data integration and interoperability challenges which lead to an immense underutilisation of data in Healthcare. If all data could be accessed in real-time and in an accessible format, clinicians would be able to make more informed decisions on how best to deliver value-based care.**

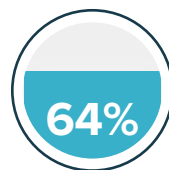
#5

## Organisations' data strategies are hampered by business challenges

Despite 79% of organisations rating analytics as a core enabler of their business priorities, there are significant business barriers to adoption. While only 18% of organisations report finding difficulty in getting executive sponsorships, securing budget remains a challenge.

But the biggest challenge in analytics adoption is technology skills shortage; this is also heightened by a lack of staff with the cross-functional skills needed to successfully deploy impactful analytics solutions. The budget conversations for all technology investments are increasingly linked to ROI discussions – having internal champions in the clinical team who understand the benefits of data and analytics can contribute to the success of these projects.

### TOP 3 BUSINESS CHALLENGES TO ANALYTICS ADOPTION IN ANZ HEALTHCARE



Lack of sufficiently skilled IT staff



Securing budget



Lack of staff with a combination of clinical and analytical skills

Question: What are the top 3 business challenges in implementing a successful analytics solution?

“

### ECOSYSTEM OPINION

Organisations should consider adopting technology that allows clinicians, operations teams, administrative staff, and senior management to uncover real-time insights through self-service without requiring intervention from the technology team.

One way to mitigate the challenges that healthcare organisations face in fully utilising the strengths of their data assets is to have a dedicated Digital Health team that has ownership of data & analytics strategies and investments. It is still early days but at least some healthcare organisations across ANZ have built a separate cross-functional Digital Health team.

### DIGITAL HEALTH TEAMS



38%  
Australia



12%  
New Zealand

# ANZ Healthcare Leaders Demand Interoperable and Smart Data

**We want software that can accumulate ALL patient data and make it easily accessible on any platform, in real-time.**

Clinical Executive of  
a Private Hospital in  
Metropolitan Tasmania

## Healthcare leaders want a change in the interoperability environment now!

Organisations are well aware of the limitations in their ability to exchange data seamlessly and in real time. Only 6% of respondents are happy to continue with the existing data exchange mechanisms – the rest want to see their interoperability environment change.

### EXPECTED CHANGES IN CURRENT INTEROPERABILITY ENVIRONMENT



**66%**

Want standardisation of data exchange



**54%**

Want access to real-time data



**34%**

Want to improve transactional workflows across care continuum

*Question: What changes would the organisation like to see in the current interoperability environment?*

Healthcare leaders want seamless, real-time access of data across the entire care continuum to help improve clinical and patient outcomes.

**Ultimately, we need a decision-oriented solution that functions with complete data transparency.**

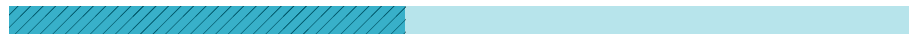
CIO of Large Public Hospital in Regional Victoria

## Organisations are starting to adopt Smart Data Fabrics

An enterprise data fabric speeds and simplifies access to data assets across the entire business. Smart Data Fabrics go a step ahead and embed a wide range of analytics capabilities, including data exploration, business intelligence, natural language processing, and machine learning directly within the enterprise data, for quicker and better insights, and predictive and prescriptive services and applications.

### ADOPTION OF SMART DATA FABRICS IN ANZ HEALTHCARE

**44%**



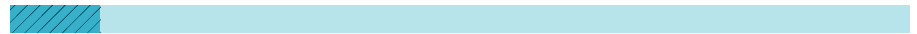
Evaluating now

**30%**



Will be beneficial in the future

**10%**



Unsure of the benefit to the organisation

**14%**



Will not be beneficial

*Question: Will SMART DATA FABRICS help your organisation?*

# About the Study

This Ecosystem study represents the views of 180 healthcare executives in ANZ – 120 from Australia and 60 from New Zealand.

The survey was commissioned by InterSystems, the leading provider of next-generation solutions for enterprise digital transformations in the healthcare industry. 70% of the respondents were from public hospitals and 50% from large hospitals (more than 200 beds).

## Departments



**14%**  
IT/Digital



**27%**  
Clinical



**19%**  
Operations



**24%**  
Management



**16%**  
Administrative

## Job Titles



**15%**  
C-Suite



**27%**  
VP and above



**19%**  
Director and  
above



**24%**  
Manager and  
above

*This whitepaper is sponsored by InterSystems. The market trends presented are based on data from the Ecosystem InterSystems Healthcare Analytics & Interoperability Study 2022. This whitepaper also represents the Ecosystem analyst's subject matter expertise in the area of coverage in addition to specific research based on interactions with technology buyers from multiple industries and technology vendors, industry events, and secondary research.*

## About the Author



**Sash Mukherjee**  
VICE PRESIDENT, CONTENT  
PRINCIPAL ANALYST,  
INDUSTRY RESEARCH

Sash is a veteran in primary and secondary research with almost twenty years of experience analysing, writing and training in industries as wide-ranging as Public Sector, Healthcare, Education and Insurance.

As a Principal Analyst at Ecosystem, Sash helps us see the bigger picture by delving into our insights and developing thought leadership to show buyers and vendors alike where the industry is heading. She is also involved in delivering consulting projects and custom engagements.

As the VP for Content, Sash works closely with the Marketing team to shape our content strategy, curating and presenting content that is on-brand, innovative, and best-in-class.

Prior to Ecosystem, Sash was the lead Asia Pacific analyst at IDC for Healthcare and Education, where she was responsible for tracking current and future technology trends in the industries and liaising with the global team on projects and thought leadership. As an in-demand industry thought-leader, she was a regular speaker and panelist at industry events, and frequently moderated conversations between key policymakers and senior IT executives - which she continues to do for Ecosystem.

Sash holds a Masters in Education from the University of California, Irvine, and a Masters in English from Jadavpur University, India. When not at work, Sash works hard on keeping her boys and her cats in line. An avid reader, she is a keen student of the human psyche and of the sociological and genetic factors that shape it.



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## About Ecosystem

[Ecosystem](#) is a Digital Research and Advisory Company with its global headquarters in Singapore. We bring together tech buyers, tech vendors and analysts onto one integrated platform to enable the best decision-making in the evolving digital economy. Ecosystem has moved away from the highly inefficient business models of traditional research firms and instead focuses on research democratisation, with an emphasis on accessibility, transparency, and autonomy.

Ecosystem's research originates from its proprietary "Peer-2-Peer" platform which allows Tech Buyers to benchmark their organisation in "real-time" against their industry or market peers. Ecosystem's broad portfolio of advisory services is provided by a team of Analysts from a variety of backgrounds that include career analysts, CIOs and business leaders, and domain experts with decades of experience in their field.



## About InterSystems

Established in 1978, InterSystems is the leading provider of next-generation solutions for enterprise digital transformations in the healthcare, finance, manufacturing, and supply chain sectors. Its cloud-first data platforms solve interoperability, speed, and scalability problems for large organisations around the globe. InterSystems is committed to excellence through its award-winning, 24x7 support for customers and partners in more than 80 countries. Privately held and headquartered in Cambridge, Massachusetts, InterSystems has 36 offices in 25 countries worldwide. For more information, please visit [InterSystems.com](https://www.inter-systems.com).



## About BCS

Established in 2007 by Luli Adeyemo, [Best Case Scenario](#) are a Sydney based agency offering nationwide marketing services, from event management and data driven insights to creating marketing content to engage Government, Healthcare, Banking & Finance and Enterprise technology buyers.

By inspiring and cultivating meaningful conversations through our integrated marketing services – from event planning to persona development - we empower our clients to create robust customer engagement strategies.