Estates and Facilities Data in the Healthcare Sector: An asset or a liability?

Barriers to Harnessing Data

Part-2

The world is how we shape it

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Part Two: Barriers to harnessing the value of data

In Part One we explored the data landscape within Estate Management and how the vast amount of data is not being translated into actionable insights. Fundamentally, it seems that healthcare organisations are unable to truly harness the value of the data they are collecting, often due to the diversity and distribution of it. We have already seen that there are challenges with quality and reliability, especially when considering that data is collected in a wide variety of methods and formats. In this section we look at the challenges around the management of data.

Data Challenges across Estate Management

The key challenges facing Estate Management teams are multi-faceted, which means their data challenges are too.

Data
No single holistic view of an organisation's estate, little analytics or insights

People
New service models & ways of working are emerging

Environment
Net Zero, Sustainability, Digital Ethics & Social Value

Estate Management Challenges

Compliance
Regulatory & Sustainable Development goals are becoming more challenging

Assets
(e.g. Buildings) are often old and non-digital. Planned / Reactive Maintenance is challenging & Supply Chains are reliant on legacy systems

Let's look at the key challenges in more detail.

The Sustainability Challenge

In October 2020 the NHS became the world's first health service to commit to reaching carbon net zero bringing stainability into a clear focus for healthcare organisations. Clearly data will be a vital part of understanding their current status and in providing evidence for changes that need to be made.
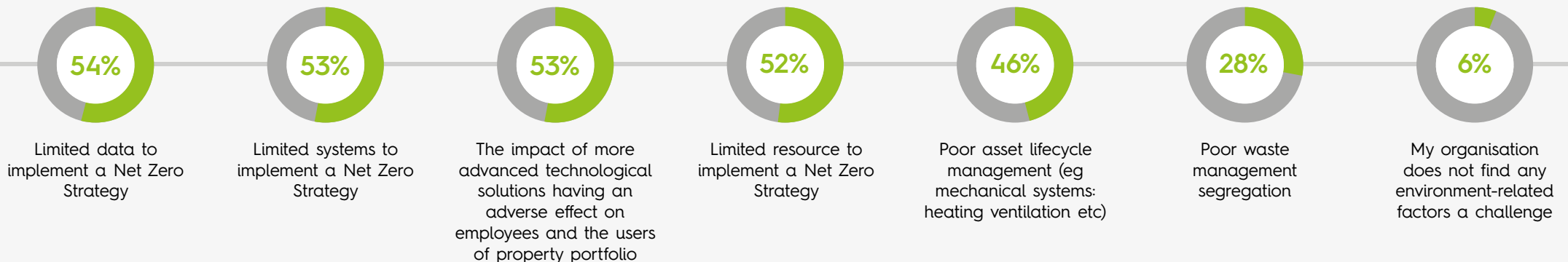
Almost all (94%) respondents identify at least one challenge that relates to environmental factors, with many of these being associated with Net Zero strategies. Over half suggest that their organisation struggles with limited data (54%), limited systems (53%) and/or limited resource (52%) needed to implement a functioning Net Zero strategy. With such fundamental contributing factors (data, systems, resources) being limited or not being available at all, these organisations' chances of effectively implementing this sort of strategy are low.

However the data indicates that the solution to this will need to be carefully considered as 53% suggest that more advanced technological solutions are already having a negative impact on employees and the users of property portfolios.

Within the context of the environment, 46% of respondents say that their organisation is struggling with poor asset lifecycle management – which could have an environmental impact due to things like the inefficient functioning of aging assets. Better insights into the overall condition and age of their assets would enable organisations to look after them more appropriately and by extension do a better job of operating more sustainably longer-term.

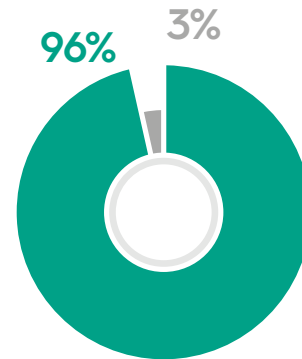## Which of the following environment-related factors does your organisation find challenging?

54%	53%	53%	52%	46%	28%	6%
Limited data to implement a Net Zero Strategy	Limited systems to implement a Net Zero Strategy	The impact of more advanced technological solutions having an adverse effect on employees and the users of property portfolio	Limited resource to implement a Net Zero Strategy	Poor asset lifecycle management (eg mechanical systems: heating ventilation etc)	Poor waste management segregation	My organisation does not find any environment-related factors a challenge

The People Challenge
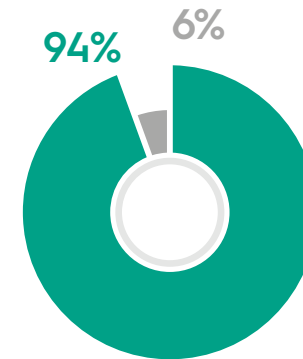
Addressing the needs of healthcare users

Healthcare organisations' long-term data strategies must take into consideration the different stakeholder groups involved and how investments could positively benefit each. Ideally a holistic approach will be taken, so that investments provide noticeable benefits across the full range of healthcare stakeholders including patients, staff, and visitors. Of course, different groups inevitably do have different wants and needs, so this is not a simple challenge to overcome. Being able to act on data relating to specific groups is arguably where that data holds the greatest potential, but also where it provides the most challenge, especially if resource and budgets limit how well data can be utilised.

Over eight in ten respondents suggest that their organisation could improve its understanding of other agencies, patients, healthcare staff, non-healthcare staff and visitors at least to some extent. This illustrates that the full spectrum of healthcare users – from the healthcare professionals working their day-to-day jobs through to the patients in need of medical help – are potentially being left underwhelmed and dissatisfied. Better management of estates and facilities data related to these users could make a considerable positive difference to their specific needs.
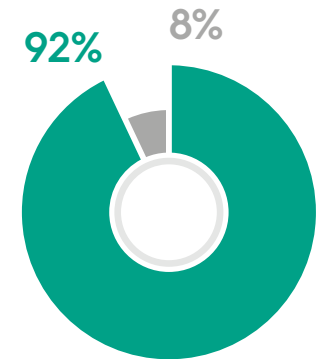
To what extent could your organisation improve its understanding of the following users' needs and demands?
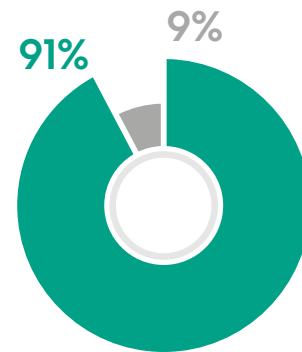
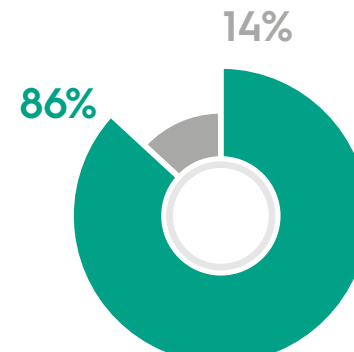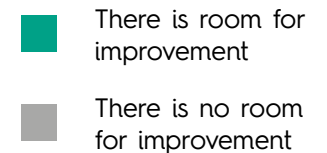**96%** / **3%** — Other agencies (law enforcement, councils, social workers, etc)

94% / **6%** — Patients

92% / **8%** — Healthcare staff

91% / **9%** — Non-healthcare staff

86% / **14%** — Visitors

- There is room for improvement
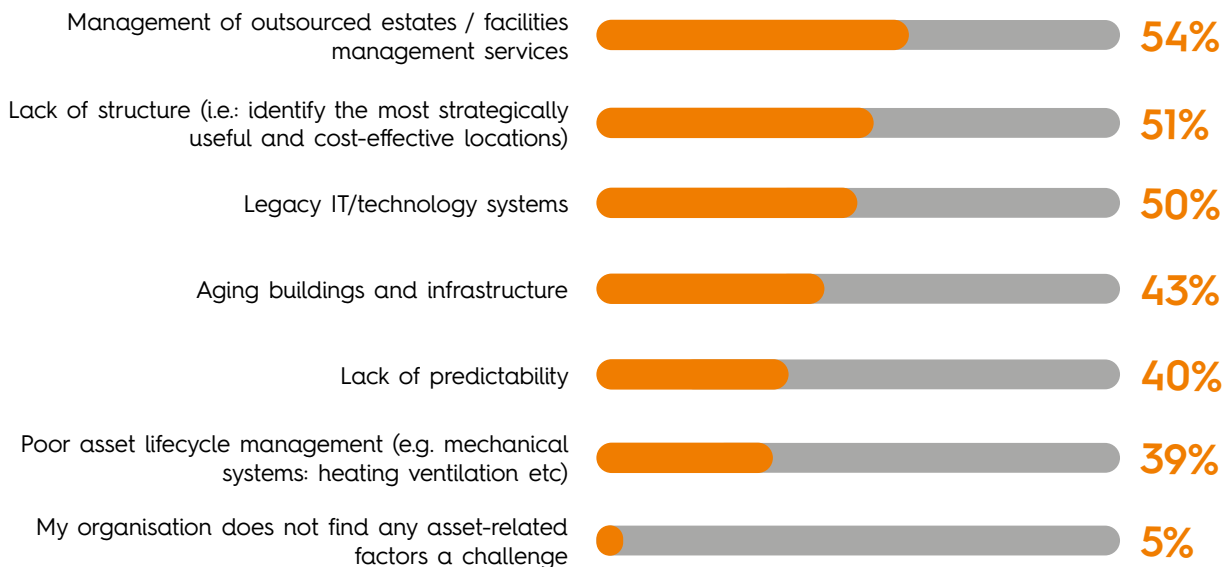- There is no room for improvement

The Asset Management Challenge

Asset management challenges are not only a problem in relation to the environment with 95% of respondents suggesting that their organisation struggles with at least one asset related factor. The most frequent issues are the management of outsourced estates and facilities management services (54%), lack of structure (51%), and legacy IT and technology systems (50%), showing that a wide range of issues linked broadly to assets need addressing.

The issue of aging assets is prevalent, with many suggesting that they struggle with aging buildings and infrastructure (43%) and poor asset lifecycle management (39%). While there is only so much that can be done to address aging buildings while working to a tight budget, understanding and utilising data around assets and facility use will enable these organisations to understand where investments are best made.

Which of the following asset-related factors does your organisation find challenging?

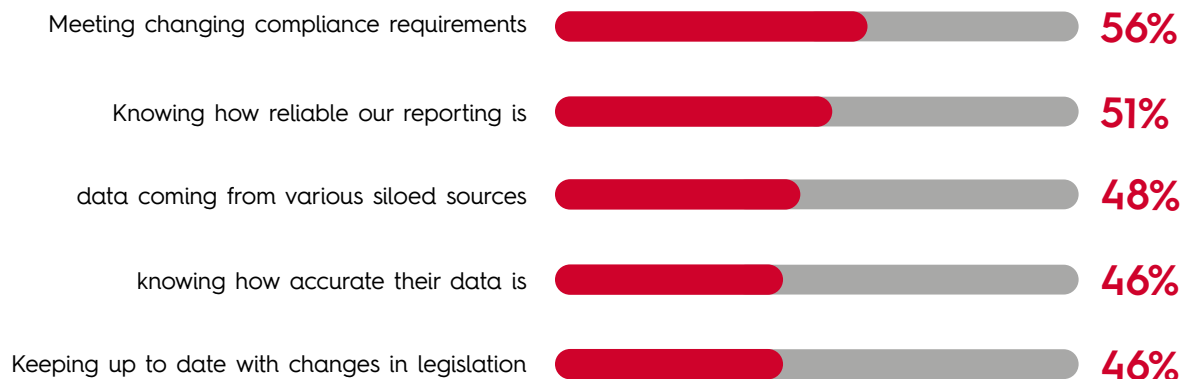| Factor	Percentage
Management of outsourced estates / facilities management services	54%
Lack of structure (i.e.: identify the most strategically useful and cost-effective locations)	51%
Legacy IT/technology systems	50%
Aging buildings and infrastructure	43%
Lack of predictability	40%
Poor asset lifecycle management (e.g. mechanical systems: heating ventilation etc)	39%
My organisation does not find any asset-related factors a challenge	5%

The Compliance Challenge

A factor that must be central to all conversations on estates and facilities data is compliance. This holds especially true within healthcare, where regulations are strict and comprehensive given the sensitive nature of much of the data that is held by healthcare bodies.

Understandably, 100% of respondents identified at least one challenge in their organisation linked to compliance when working with estates and facilities data. Over half (56%) suggest that simply keeping up with changing compliance requirements is difficult, with many (46%) saying the same about changing legislative requirements. Though, as difficult as it is, these moving targets must be adhered to, else the punitive fines that may follow could be hugely damaging for these organisations.

Data management issues are, once again, very common. Around half highlight that they struggle with knowing how reliable their reporting is (51%), data coming from various siloed sources (48%), and knowing how accurate their data is (46%). As things stand, the IT and data management infrastructure is often not sufficient to enable these organisations to see data for what it should be – an asset and decision-making ally – rather than what it often currently is – a confusion-inducing liability.

Which of the following compliance-related factors does your organisation find challenging?

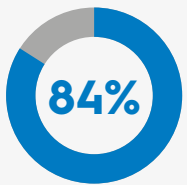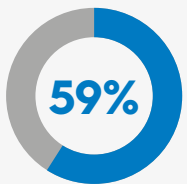| Factor	Percentage
Meeting changing compliance requirements	56%
Knowing how reliable our reporting is	51%
data coming from various siloed sources	48%
knowing how accurate their data is	46%
Keeping up to date with changes in legislation	46%

The Data Management Challenge

A key hurdle for organisations to address as they seek to improve their overall data management is how their data is being stored. Over nine in ten respondents note that estates and facilities data is held in multiple different formats (94%) and different places across the organisation (92%), underlining why this can become and often is relatively complex to manage.

As a result, the majority (84%) admit that they do sometimes struggle to know exactly where estates and facilities data is held within their organisation, while 59% agree that within their organisation, this data is difficult to understand to get a holistic view. This lack of management and organisation of data could have considerable real-world consequences for patients and other users of healthcare services.

84% admit that they do sometimes struggle to know exactly where estates and facilities data is held within their organisation

59% agree that this data is difficult to understand to get a holistic view

Collection
Healthcare organisations need to ensure they are collecting all data possible relating to estates and facilities.

Storage
This data needs to be stored in a secure location, in as few different formats and places as possible.

Analysis
This will allow the data to be fully analysed and utised.

Benefits
And lead to the many benefits of having access to the data in the first place.

How data management could be improved

Not all data (and therefore data management) is created equal. Some areas of estates and facilities data which need more attention than others include data collection, ingestion, and integration (47%) and data analysis (44%), while data cleanliness and hygiene (40%) and technology to support understanding of data (40%) were not far behind.

Legend:
- Total [100] (purple)
- Healthcare - public sector [50] (pink)
- Healthcare - private [50] (grey)

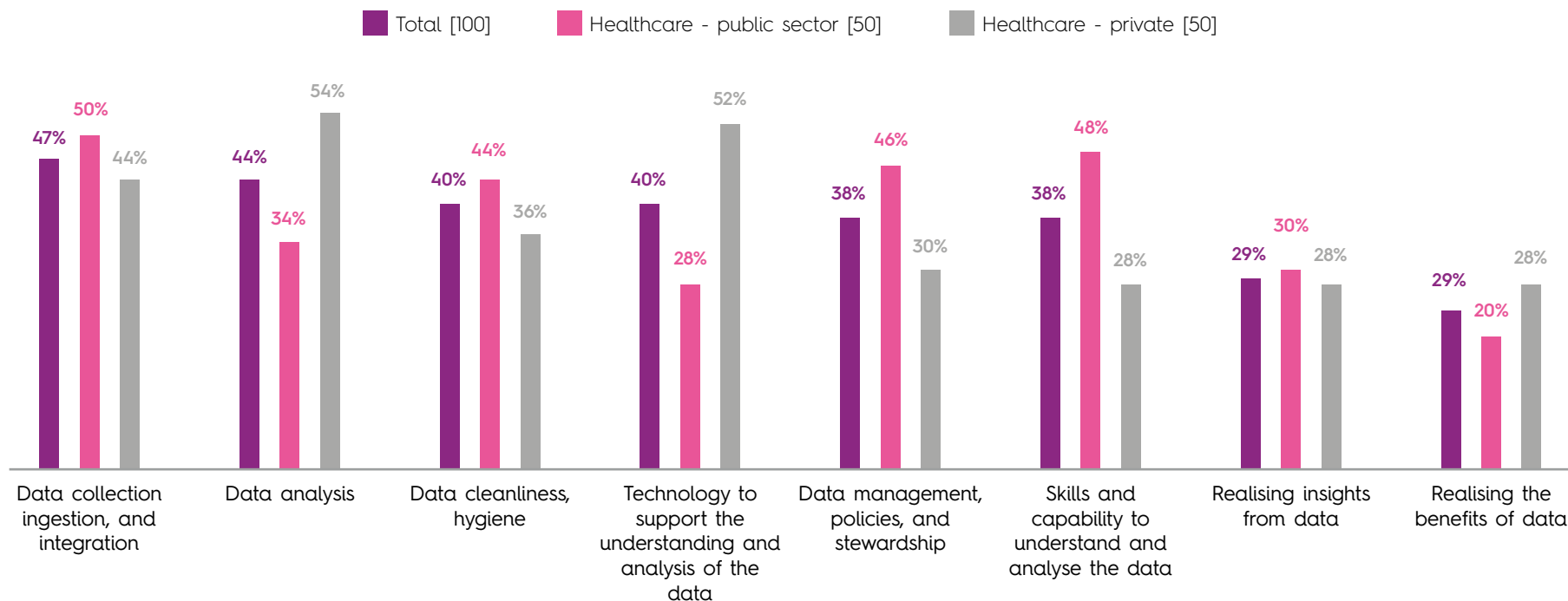| Category	Total [100]	Healthcare - public sector [50]	Healthcare - private [50]
Data collection ingestion, and integration	47%	50%	44%
Data analysis	44%	34%	54%
Data cleanliness, hygiene	40%	44%	36%
Technology to support the understanding and analysis of the data	40%	28%	52%
Data management, policies, and stewardship	38%	46%	30%
Skills and capability to understand and analyse the data	38%	48%	28%
Realising insights from data	29%	30%	28%
Realising the benefits of data	29%	20%	28%

Figure 2: In which of the following areas does your organisation have the most room for improvement within estates and facilities data? Combination of responses ranked first, second and third [100] asked to all respondents, split by sector

Too much data, too little insight

Our research identified that there is a significant need to improve the skills and capability within organisations to understand and analyse the data they hold. This is reiterated by the King's Fund research, which found that the availability of strategic and technical skills varies across the NHS, making it difficult to get the most from their data. Optimising operations through effective data management and use seems to be a little way off as things stand.

Data holds the key to an organisation becoming truly insightful and being able to make smart, data-driven decisions about how to make the most effective and efficient use of its estate. But that's only when data is used correctly. It needs to be accurate; it needs to be available in real-time, and organisations' strategic plans need to be designed to allow this to happen. For many, targeting improvements in the above areas (e.g., collection, ingestion and integration) will be a sensible place to start.
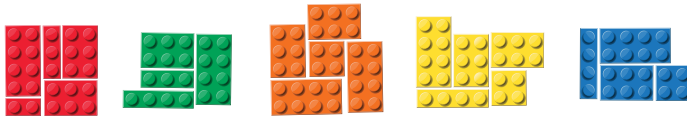
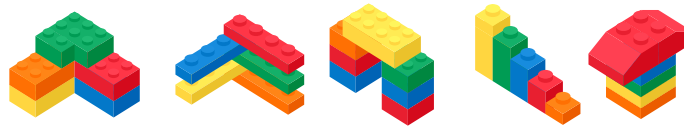# The Data Maturity Journey

Data

Sorted

Arranged

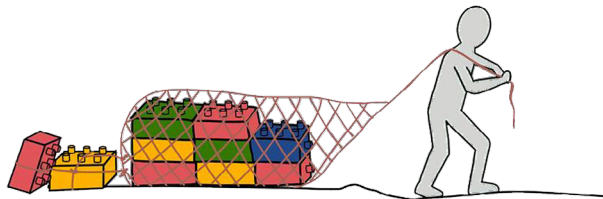Presented visually

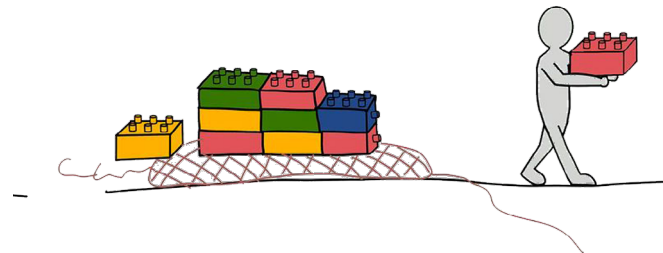Explained with a story

Actionable (Useful)

Developing a data driven strategy for Estates Management

The answer to developing and transforming how data can be used in healthcare contexts, requires organisations to create a comprehensive data strategy and find the right technology solution to address the strategy. Data solutions don't need to be overly complex or expensive – instead, they need to be smart enough to allow organisations to take advantage of the wealth of data, systems and sources that they already have.

We have already established that healthcare organisations own an enormous amount of data, so what they require is something to help them integrate and organise it in such a way that it delivers clear, actionable insights to them, so that they can address these challenges and deliver an overall better experience to those that matter most – the patients and users of their services.

If you can't do it altogether

It's okay to do one step at a time

More Information

Sopra Steria helps clients to optimise their physical estates through true digital transformation. We have over 35 years' experience in Estate Management digitalisation across the public and private sectors. Our proven approach to creating an Estate Management ecosystem helps clients to adopt new technologies and integrate existing processes and systems to streamline the complex and varied tasks involved in Estate Management, while maximising efficiency and sustainability.

For more information on the property services we provide to public and private sector organisations, please email us at EstateManagement@soprasteria.com.

Or you can visit us at *https://www.soprasteria.co.uk/capabilities/business-services/estate-management*

We look forward to working with you.

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