## All your data, in one place True data management in healthcare

Today, data-driven and purpose-built healthcare environments are more than a competitive advantage; they're a necessity. To abide by the UK Government's latest Information Management Mandate, NHS Trusts must better control and manage their data to unlock more significant funding opportunities.

Thankfully, the tools to seamlessly manage, share, and leverage building data—from planning to construction—are available right now.

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## Introduction

#### Better how you build

Under the Central Government BIM Level Two Mandate, there's a need for NHS Trusts to upgrade the way they manage data—from before designs start throughout the construction process. Failing to do so may deny them funding.

We need to improve how NHS hospitals are built. Software must be upgraded, data tracked, and processes optimised before funding can be approved. To fully abide, and thrive, under this mandate, a Common Data Environment (CDE) must be adopted —powering you to monitor, manage, and visualise data throughout a hospital's lifecycle.

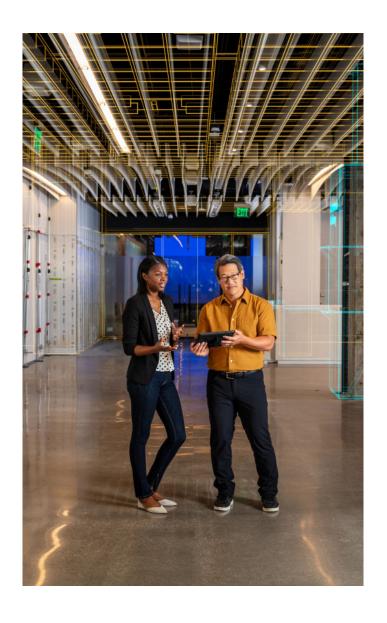
#### **Bring data together**

A Common Data Environment (CDE) is a single source of information used to collect, manage and distribute documentation such as graphical models and supporting materials needed for every project stakeholder.

With this single source of information, the collaboration between contractors and owners is smoother and more efficient. Data centralisation also helps teams avoid mistakes and deliver projects on time and budget.

#### **Data-based benefits**

With a CDE, building smart hospitals is easier, faster and more sustainable than ever before. Explore the specific benefits you can feel throughout your project lifecycle:





Build with BIM



Save costs



Go greener



Build smarter



Minimise risk



Control your data





## Benefits of a Common Data Environment



#### **Build with BIM**

Building Information Modelling (BIM) is the holistic process of creating and managing information for a built asset. With BIM usage skyrocketing, NHS Trusts can benefit from a process that uses structured, multidisciplinary data to produce a digital representation of hospitals that are yet to be built.



#### **Save costs**

With tools that enable data transparency and availability before, during and after the build process, every stakeholder will be able to optimise operations. Well-structured digital data sharing provides Trusts with a way to comply with the government mandate while giving architects, engineers and construction firms a way to work without waste.



#### Go greener

New hospitals need to set the example for sustainable infrastructure. The goal is for the NHS to become a truly sustainable operation, reaching net-zero carbon emissions by 2040. By building smart hospitals, NHS Trusts will automatically achieve this—using better, longer-lasting materials and leveraging data to build facilities that can keep their productivity for years to come.

"The goal is for the NHS to become a truly sustainable operation, reaching net-zero carbon emissions by 2040."

### Case study: Milton Keynes University Hospital (MKUH) NHS Foundation Trust

Milton Keynes University Hospital (MKUH) services to the growing population of Milton Keynes and the surrounding areas. With around 550 beds and employing more than 4,000 staff, the hospital sees and treats approximately 400,000 patients each year. Using Autodesk Construction Cloud as their Common Data Environment, MKUH integrated available 3D models, a collection of 2D drawings and an assortment of operations and maintenance manuals from the planning, design and build process.







## Benefits of a Common Data Environment



#### **Build smarter**

By adopting Modern Methods of Construction (MMC), future hospitals can be designed better, built faster, and last longer.

Innovations like modular construction allow you to be more dynamic, plan out specialised rooms and, most importantly, make hospitals flexible enough to take on unexpected emergencies or patient surges.



#### Minimise risk

Track and safeguard your data with interconnected software solutions, using a common data thread to monitor, secure, and fully visualise your information.



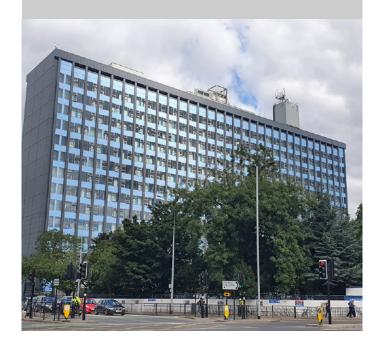
#### **Control your data**

With your own CDE, you can take control of your data, monitor it, and control your hospital before it is even built. Traditionally, NHS Trusts do not own the CDE. But with one at your fingertips, you can collect data that is useful for your business at every stage of the lifecycle.

"Future hospitals can be designed better, built faster, and last longer."

## Case Study: Hull University Teaching Hospital

Hull University Teaching Hospital supports 765,000 people of all ages. Their in-house project team manages their real estate footprint to lead several capital development and refurbishment projects. Their drive to go paperless led them to find a single software-based solution that suits all of their needs—from replacing a light bulb to sourcing missing ceiling panels. With Autodesk software, they've moved to a completely paperless way of working, speeding up processes and reducing human error.







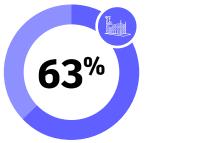
### **Statistics**

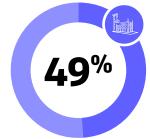
The UK government has made a sizeable commitment to building new hospitals.



**40 new hospitals** in England by 2030, with a **£3.7 billion** budget.¹ Plus, in 2021, the government approved funding for **eight more.¹** 

#### **Efficiency**





**63% of construction professionals** rely on outdated paper-based processes—making projects **less able to adapt to changes.**<sup>2</sup>

**49% of construction professionals** transcribe data from paper-based documents into digital platforms, wasting countless work hours.<sup>2</sup>

#### **Innovation**

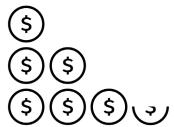
By combining BIM with modular construction, hospital construction times can be reduced by **up to 50%** compared to traditional methods.<sup>3</sup>

This blend of adaptable building and data accessibility can cut costs by up to 20%.3

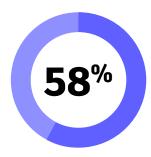


#### **Rework reduction**

Rework costs the construction industry \$65 billion per year, so catching issues sooner can prevent billions in losses.<sup>4</sup>



Aside from improving productivity and schedule compliance, **58% of construction firms** say BIM leads to **far fewer field installation errors.**4



#### **Cost savings**

With BIM, choosing materials can be more organised, sustainable and cost-efficient—culminating in **13%** cost savings.<sup>5</sup>

13<sup>%</sup> cost savings

Shorten project completion times. Cloud-based software allows contractors to save three hours of work per person per week.<sup>5</sup>



#### References

- **1** "The new hospitals building the future of health infrastructure", Niamh Macdonald
- **2** "Construction Cloud Beginners Guide to Connecting Construction Data and Documents", Autodesk
- **3** "The Benefits of Modular Construction in Healthcare", Nicole Rupersburg
- **4** "Top Benefits of BIM for General Contractors", Autodesk
- **5** "Collaboration and connectivity in construction: Turning data into business value in the cloud", Autodesk



# Partner with Autodesk & Symetri

#### **Healthier data systems**

Our data solutions offer a way to:

- Connect workflows, teams and data at every stage of construction to reduce risk, maximise efficiency and increase profits.
- Drive trust and collaboration across teams while promoting data transparency with secure and easy-to-integrate data platforms.
- Enjoy constant access to your data with seamless cloud connectivity and software compatible with various file formats.

#### **Use data with purpose**

By partnering with Autodesk & Symetri, you can create a bespoke digital strategy for future NHS hospitals. Reach out and discover how smart data usage can improve transparency, collaboration, quality and compliance across your team—ultimately helping you drive innovation, enhance sustainability and maximise your project's potential.

