ensono

CASE STUDY

Advancing Healthcare Innovation: A Pioneering SDE Set to Transform Patient Outcomes

The Client

Serving a population of over six million people, our client — one of twelve UK secure data environments — is at the forefront of healthcare data innovation through its integral role in the national Data for R&D Program. The regional Secure Data Environment (SDE) initiative is supported by several NHS Integrated Care Systems. The client, a consortium of care providers and NHS trusts, strives to pioneer one of the country's first Sub-National Secure Data Environments dedicated to patient data, and they invited Ensono to support an ambitious and aggressive timeline for delivering their new data platform.



The Challenge

In 2022, the Secretary of State for Health and Social Care launched a significant commitment under the "Data saves lives: reshaping health and social care with data" policy, emphasising the critical role of data in transforming healthcare. This initiative was further underscored by the Goldacre Review, which highlighted the potential of data to drive research, innovation, and improve the quality, safety, and efficiency of health services. The review specifically pointed out the importance of data in discovering effective treatments, monitoring health service performance, and fostering innovation across the life sciences sector.

Funding was provided to support the creation of Secure Data Environments (SDEs). The client was tasked with designing and implementing the first phase of their data platform within four months, aiming to establish a robust, flexible, and scalable end-to-end service to support researchers, analysts, and planners throughout the health and care ecosystem. This ambition was set against the backdrop of overcoming the barriers and inhibitors identified in the Goldacre Review. Moreover, the client had to ensure the security of the platform and strive for efficient use of resources. A critical aspect of their strategy was making the platform self-sustaining in the future and return value to the NHS by working with industry and academic partners to support research that would benefit patients.

The Solution

The regional SDE initiative represents a transformative approach to healthcare research, enabling secure and streamlined access to de-identified patient data from multiple sources. By consolidating this data into a single, cohesive platform, the SDE overcomes obstacles of data fragmentation across the extensive geographic area. This paves the way for more efficient and impactful research, driving advancements in patient care and health outcomes.

To meet the ambitious deadlines for the SDE's deployment, Ensono employed its proprietary automation framework, which significantly expedited the development and ensured the delivery of a secure and robust Azure infrastructure. This strategic application of technology and expertise underscores Ensono's role as a relentless ally in the consortium's quest for excellence in healthcare research.

Ensono's substantial contribution and innovative strategies have cemented its position as a pivotal force in the project's success, highlighting the power of collaboration in achieving transformative healthcare solutions.

The Results

Ensono and the client team efficiently constructed the SDE, completing the data platform within a stringent 4-month timeframe, making it the only Sub-National SDE to meet NHS England's initial deadline. By utilizing Ensono's automation framework for rapid Azure infrastructure deployment, the project's first phase was accelerated enabling the consortium to become operational ahead of other regions still navigating procurement processes.

Successfully passing two rounds of security penetration testing conducted by one of the nation's leading defense contractors, the SDE ingested the first dataset in the last week of the deadline, transforming and publishing this for research access by the end of the month.



The Future

This engagement marked a unique partnership model between the public sector and Ensono, where Ensono invested in the opportunity in partnership with the healthcare consortium.

The success of this program is expected to pave the way for more consortiumbased projects in the UK and supports the objectives outlined by NHS England to make better, productive, and more meaningful use of patient data for research.

Given the diverse population across its region, which is an excellent sample for the global population, this particular regional SDE is destined to become the go-to platform for researchers studying global diseases and conditions by facilitating secure research access to real-world patient data.

The platform will also attract international pharmaceutical companies, who can analyze diverse, globally representative datasets to develop new treatments or drugs.

To find out more, talk to your Ensono representative today. Connect with our team.

©2025 Ensono, LLC. All rights reserved.