










**Main Research Question:** *How to develop a scalable, secure, and GDPR-compliant data storage solution for multiple care homes?*

Nr.	Sub Question	Method	Strategy
1.1	How can the data storage architecture be designed to handle the growth of multiple care homes efficiently?		<b>Best good and bad practices:</b> Identify and analyze both best and worst practices in scalability to guide the design of an efficient, future-proof data storage architecture.
1.2	What cloud or on-premises solutions should be considered to ensure flexibility and easy scaling?		<b>Available Product Comparison:</b> research what hosting platform suits our scalability needs
1.3	How to future proof the system to easily integrate with other healthcare platforms or emerging technologies?		<b>Pitch:</b> Demonstrate and review integration possibilities in a showroom setting, allowing stakeholders to see how the system can evolve with new technologies.
1.4	How to ensure the system performs well as the number of users, data points, and care homes increases?		<b>Scalability Testing:</b> Use controlled lab environments to test the architecture under various load scenarios, ensuring the design can handle growth efficiently.
2.1	What encryption standards (in-transit and at-rest) should be implemented to secure sensitive health and personal data?		<b>Best good and bad practices:</b> Engage in a thorough literature review of encryption standards and their best practices in healthcare and GDPR contexts.
2.2	How to design the system to comply with GDPR's data protection, and user consent requirements?		<b>Literature Study:</b> Use the library setting to research GDPR compliance guidelines and integrate these findings into the system's design.
2.3	How can the system ensure seamless data integration from various care homes while maintaining standardization?		<b>Product Review:</b> Conduct workshops with stakeholders (care home IT teams, software vendors) to co-design
2.4	What measures should be taken to protect against cyber threats, such as data breaches, ransomware, and unauthorized access?		<b>Security Test:</b> Use the lab environment to simulate cyber-attacks and evaluate the effectiveness of various security measures, including firewalls, encryption, and access controls.
2.5	How to facilitate secure data received from care homes, healthcare providers, and other relevant parties?		<b>Security Test:</b> Test secure data-sharing practices in real-world care home settings to evaluate how data is shared between providers, identifying any potential gaps.