DMS Data Transfer - Cross Functional Requirements

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The cross-functional requirements aligned to the uplift of the Data Migration overarching standard to mandate the use of internet-based data migration.

Glossary of Terms

The Software Solution	The COTS or developed software adopted by the supplier to coordinate the migration of practice data.
The Migration Pipeline	The network or internet service responsible for migration of practice data.
The Protocol	The protocol which the The Migration Pipeline utilities for data transfer.

Cross-Functional Requirements

ID	Requirement	Category	MoSCoW
CFR001	The network should be capable of having a minimum available link speed of 70 Mbps supporting a transfer of ~35,000 patients in < 24 hours.	Performance Efficiency	М
CFR002	The software solution should have the ability to resume the transfer process from last verified file transfer.	Recoverability	S
CFR003	The software solution should perform the verification of data integrity by employing checksum verification per file.	Reliability	М
CFR004	The software solution shall be able to handle rolling back of transactions in the event of errors, in a manner which ensures integrity and consistency of the solution.	Recoverability	Μ
CFR005	The payload should be consist of no more than 1 EHR per file, and no more than 1 document per file. Documents should not be embedded within the EHR	Recoverability	S
	The Software Solution should support multithreaded transfer.	Performance Efficiency	Μ
CFR006	The protocol should support compression at a protocol level.	Performance Efficiency	S
CFR007	The protocol must use TLSv1.2+	Security	Μ
CFR008	The software solution shall use Role Based Access Control (RBAC)	Security	Μ
CFR009	The software solution shall support pull-based interface integration allowing target suppliers to control the receipt of data.	Interoperability	S
CFR010	The software solution may employ Message-Oriented Middleware (MOM) for interface integration.	Interoperability	S
CFR011	The software solution shall be stateless in that clients and external systems will send all data required to process in isolated interface interactions regardless of previous interface interactions.	Interoperability	М
CFR012	Messages received on any interface shall be prioritised and processed in the order in which they are received on that interface.	Interoperability	М
CFR013	The software solution shall be capable of being updated with changes within ti meframes outlined by the GPITF Service Management Framework. This will include the deployment or reconfiguration of new or additional infrastructure resources such as servers, databases, network, and security devices into a selected environment.	Maintainability	Μ
CFR014	The software solution shall maintain an audit trail of file verified, transfer begin and transfer end events.	Maintainability	М
CFR015	The use of proprietary data formats within the software solution shall be avoided in preparation for future structured messaged formats.	Interoperability	S
CFR016	Data in motion between the target and source suppliers shall be communicated via a secure, high-speed network referred to as the Migration Pipeline.	Interoperability	М
CFR017	The Migration Pipeline shall facilitate the connection of source to target supplier regardless of the infrastructure or hosting solution (e.g., data centre or cloud-based)	Interoperability	М

CFR018	Latency across the Migration Pipeline shall be 200ms or less, including during periods of peak data throughput.	Interoperability	М
CFR019	Latency across the Migration Pipeline shall be measured using a declared and agreed method. A round trip is measured by the local clock in the pinging system, from when the request left to when the reply arrived.	Interoperability	Μ
CFR020	The Migration Pipeline shall be flexible to accommodate periods of increased network traffic volumes without the need to upgrade to a costlier bearer service.	Interoperability	Μ
CFR021	Ubiquitous patterns, protocols and architectural styles of interoperable machine-to-machine interactions between data exchange gateways network shall be supported, for example RESTful web services.	Interoperability	М
CFR022	The Migration Pipeline shall conform to the requirements outlined in the Hosti ng & Infrastructure overarching standard.	Interoperability	М
CFR023	The software solution shall conform to the requirements outline in the Interope rability Standard	Interoperability	Μ