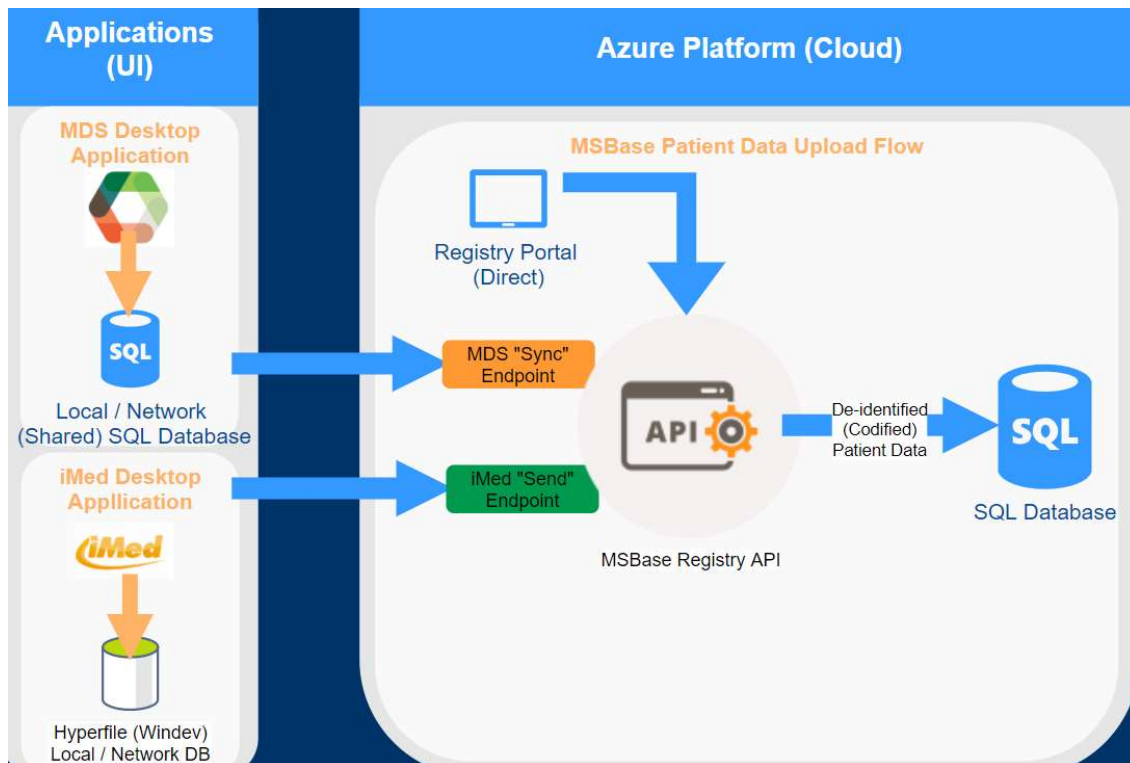
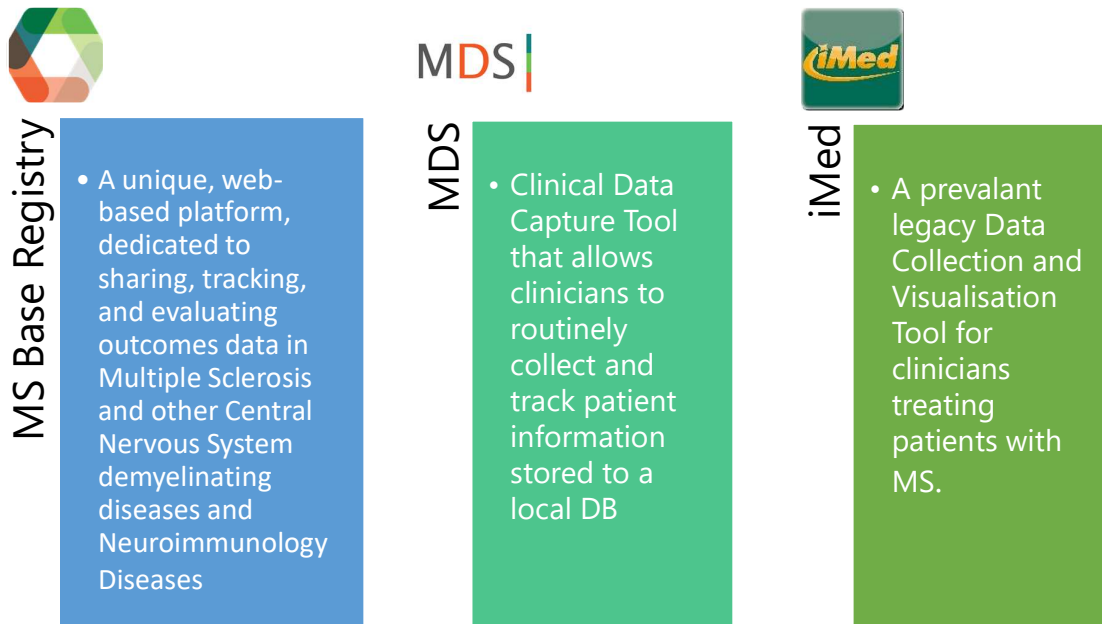


High Level Overview of MSBase Software Applications v2





Systems Overview, Features & Benefits

	Registry	MDS (MSBase Data Entry Solution)	iMed
System	Originally an ongoing longitudinal, observational database that commenced in 2004, more recently modernised to be available as an Online Web Platform. Codified patient data collected by MSBase Members is pooled in a secure, cloud-based SQL DB, hosted by Microsoft Azure and available to participating clinicians for research purposes.	MDS, launched late 2017, is the new MSBase flagship application for Data Entry installed as stand-alone, peer-hosted or network (SQL server) within the centre. Data from consented, enrolled patients are uploaded to the Registry using seamless integration via a synchronisation mechanism. This can be set to manual or automated.	Launched in Jan 2000, iMed is used in over 1000 Centres globally, and is a prevailing electronic system for storage and management of MS Patient data. Data can be uploaded to the Registry via manual export, and in more recent versions, via direct push (sync). Note that support for version prior to 6.7 will no longer be supported after 2022.
Key Features	<ul style="list-style-type: none"> - Online User Portal accessible to authenticated MSBase Members - Enables creation, management and joining of Sub-studies – utilising observational data only. - Role-based Access Management (Principal Investigator – PI, Co-PI, and Investigators – I and Member) - Patient database containing over 80 000 patient records as of April 2022 	<ul style="list-style-type: none"> - New, User-friendly Data Entry Forms - Multi-user & network capabilities - Reporting Module - Advanced Search Functionality - Extensible via Flexifields - Interactive Patient Overview Graph - View & Filter Centre statistics - Automatic EDSS Calculator - Can accommodate iMed Imports - New features incorporated 	<ul style="list-style-type: none"> - Intuitive, well-known legacy UI - Multi-user & network capabilities - Reporting Module - Search capability - Extendible via Flexifields - Patient Overview Graph - Automatic EDSS Calc - Can migrate to MDS
Key Benefits	<ul style="list-style-type: none"> - Enterprise-class encryption using windows Azure SQL Data encryption - Benchmarking of observational, real-world data - Dynamic and evolving collaborative study group 	<ul style="list-style-type: none"> - Modernised UI and improved navigation and speed - Improved Data quality through inbuilt validation checks - MedDRA standardised medical terminology integrated - Seamless integration to Registry via API 	<ul style="list-style-type: none"> - Multilingual (13 Languages) - Easy & quick installation - Easy to use - New iMed User Portal and users are required to register. - iMed v7 has MedDRA integrated.

iMed vs MDS – Fundamental Differences

<u>iMed</u>	<u>MDS</u>
20-year-old legacy clinical data collection system	Modernised data collection tool built using newer web technology
Installation of iMed for multi-user environments is simpler and faster.	The MDS installation process can be complex, involved, and nuanced for multi-user environments.
Slower processing, especially on a network / multi-user environment, due to large number of patient records indexed using flat files (Hyper file DB) - generating heavy network traffic – Also potential for records to get “locked” (<i>Better for smaller centres</i>)	Faster speed and processing with SQL Database server engine, architecture ensures optimised use of indexing and DB resources. The system is designed for better multi-user support, although it is complex in design. (<i>Better for larger centres</i>)
iMed is not integrated directly to the MSBase Registry, data uploads require a more manual “user-driven” process and requires improvement going forward. The new “Send now” feature available to MSBase Members does however make this easier.	Tighter, seamless integration directly with the MSBase Registry. Synchronisation of patient data up to the Registry is very simple and can be set to manual or automatic.
iMed recently implemented MedDRA in Version 7.0	MedDRA standardised medical terminology integrated
Multi-lingual capability – iMed is available in 13 languages presently, and its use is also more widespread.	Multi-lingual capability does exist, but needs more work to be on equal footing with iMed (Long-term roadmap)
MGBase is not available in iMed and is not on the roadmap for future development.	MGBase is live and fully operational in MDS and has its own Registry – mgbase.org
Older, but trusted and reliable system for capturing, collecting, and managing MS patient data. Fairly easy to maintain and update.	Newer, modernised collection tool for MS Patient data with some newer features and advanced functionality, although currently only used in 40 centres globally, the system is still being stabilised as teething issues are worked through.
There are no plans for “sunsetting” iMed, MSBase will continue to maintain and support iMed for the foreseeable future. For Governance / IT Security / Access reasons, some hospitals that already use iMed, may want to continue using iMed and MSBase will support this as far as possible.	Following the Governance, Legal and IT Security review processes, if a Centre can successfully migrate to MDS and use it, these centres can then take advantage of the new features and functionality built into MDS over the past 2-3 years.
Key Module / Feature Differences:	
New modules added to iMed <ul style="list-style-type: none"> - New Pregnancy module (EUROCAT classification) - NMO / NMOSD module 	New modules added to MDS <ul style="list-style-type: none"> - New Pregnancy module (EUROCAT classification) - NMO / NMOSD module - MG (Myasthenia Gravis) - Integrated with Floodlight MS, MS IMPROVE (MSPT and MSReact Tests) also Icometrix (QMRI Metrics) - Corticosteroid / Variable Dosing Schedule functionality