

### 1.20.1 IT Hardware & Software

Please provide details of the proposed hardware and software to be used and details of any third party IT Suppliers to which you are sub-contracting elements of the proposed solution.

(Maximum Word Count – no limit but be concise)

#### 1.20.1.1-Desktop / Laptop Client

Vocare use Microsoft Windows 10 version 2004 on all desktops and laptops. Our patch management policy ensures that we remain within 3 releases of the Microsoft recommended version. Sophos Intercept X virus protection is used on all devices and all laptops connect to the network remotely through an SSL VPN provided by Pulse Secure. All users have named active directory accounts secured by a complex password to meet IS27001 requirements/certification. Bitlocker encryption software provides additional security for laptops.

Citrix is used to access the hosted Adastra platform from a secure data centre hosted by Advanced Datacentre Systems. All assets are logged within our asset management system and are additionally tracked through Ivanti end point management, allowing us to audit the hardware and software, rollout patches and security fixes and remotely support our IT Users.

All staff have access to corporate email delivered through O365 Exchange Online allowing access to email through a browser enforcing multi factor authentication (MFA). Secure email, allowing staff to send and receive patient identifiable data is provided through NHS.Net accounts.

#### 1.20.1.2-Cars / Toughbooks

Each car is equipped with an aRemote device which connects to the Adastra hosted platform via 3G and uses a specific version of Adastra designed to work "offline" for periods where there is no mobile reception in the home visiting cars. The aRemote devices operate a Windows 10 operating system. Clinicians have access to summary care record (SCR) and special patient notes (SPN's).

#### 1.20.1.3-Printers

Vocare is a paper-light organisation. Prescription printers are installed at our Bases as contingency where EPS (Electronic prescribing) is not available.

#### 1.20.1.4-Connectivity

Primarily, each Centre (Base Location) is connected to our core MPLS secure network, provided by Zen. We believe deploying a dedicated, segregated network with appropriate SLAs in place provides the most resilient and reliable solution. If it is not possible to provide our own MPLS connectivity, [where the Centre is on a hospital site and it is not possible to install our own cabling], we are able to access Adastra over the existing base location connectivity.

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### 1.20.1.5-Server

Adastra is provided as a hosted application, securely delivered from two geographically distant UK Tier 3 ISO27001 accredited data centres. Both the application and the data are effectively mirrored across multiple servers and both data centres, providing high availability and resilience in the event of a component failure. Load balancing technology helps improve performance and resilience by distributing user activity between both centres. The Adastra system itself and the data centre infrastructure are proactively monitored and managed twenty-four hours a day, 365 days a year from two geographically distant network operations centres ('NOCs').

Servers operate with N+1 power supplies, teamed and redundant network connections to multiple datacentre level network switches (40GB backbone). External storage is connected using multipath technology, i.e. if a switch fabric fails or a cable fails, access to the RAID storage will be continuous. Hot swappable components are used where possible (power supplies, hard drives). Server roles are N+1 where possible and hardware level remote management solutions are deployed. We deploy UPS (Uninterrupted Power Supply) at our Centres to mitigate against localised power failures.

Hosted Adastra applications can be scaled on demand to meet capacity requirements. This includes for both users accessing from HSCN bases and home workers.

### 1.20.1.6-Proposed hardware summary

Hardware item	Purpose	User roles	Location
Desktop	Access to applications	Centre based staff	Base locations
Laptop	Access to applications	Remote/home working staff	Remote/home
Tough books	Access to applications	Home visiting clinicians	Cars
Prescription printer	Contingency for EPS	Prescribing clinicians	Base locations
Server	Delivery of systems/applications	IT	Data Centre

### 1.20.1.7-Proposed software summary

Software application	Purpose	User roles	Location
Microsoft Windows 10 version 2004	Operating system for desktops and laptops	All users	All
O365 Exchange Online	Company email	All users	All
NHS email	Secure email for sending patient identifiable data	All users involved in patient care	All
Sophos Intercept X virus protection	Anti-Virus protection	All users	All

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Software application	Purpose	User roles	Location
Bitlocker	Laptop encryption	All laptop users	N/A
Adastra	Clinical management system	All users involved in patient care	All
Citrix	Delivery of applications to end users	All users	All

**1.20.1.8-Third party IT Suppliers to which we are subcontracting solution elements**

Vocare will not be using any third-party suppliers in the delivery of this contract.

Managed service contracts with appropriate Service Level Agreements are in place with our service providers [e.g. data centre, MPLS]. We will extend our relationship with Advanced to provide a managed service in respect to our access to the West Midlands Alliance Adastra platform.