G-Cloud 12
Service Definition Document
CareCentric Population Health

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Version: 1.0

Created: 20/07/2020

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1 Service Definition

Graphnet Health was formed over 25 years ago and is today the UK's no.1 leading supplier of integrated care record software to the NHS and care services.

Graphnet specialises in the delivery of shared care records across entire care communities, holding health and care information on over 16m patients. Our solutions are designed to support the delivery of integrated care services by providing access to a single, secure electronic health record.

Graphnet is the UK's foremost supplier of integrated care record software to the NHS, social and care services. Its CareCentric software combines a shared record with community-wide assessment, workflow, care planning, and specialist apps for long-term conditions. It also supports patient engagement, through the use of the myCareCentric Personal Health Record, and population health management. Graphnet's integrated record software is used by over 40 CCGs.

Our health and social care solutions allow for the integration of services across whole care communities for better, safer care. This is achieved by linking information from multiple systems, integrating workflows between care settings, supporting multi-provider reporting & analysis and engaging patients to self-care.

Our solutions use leading edge technologies - including mobile, wearables, instant messaging, the cloud and machine learning - to radically improve services and the way care professionals and patients interact together.

Graphnet's ethos is to work closely and collaboratively with our customers and IT partners. Our mission is to make a lasting difference to care outcomes by supporting the delivery of modern, integrated NHS and local authority care services.

We are part of the System C & Graphnet Care Alliance, a strategic alliance offering integrated IT solutions to the health and social care market, transforming the way services are provided.

2 An overview of Graphnet's Population Health G-Cloud Service

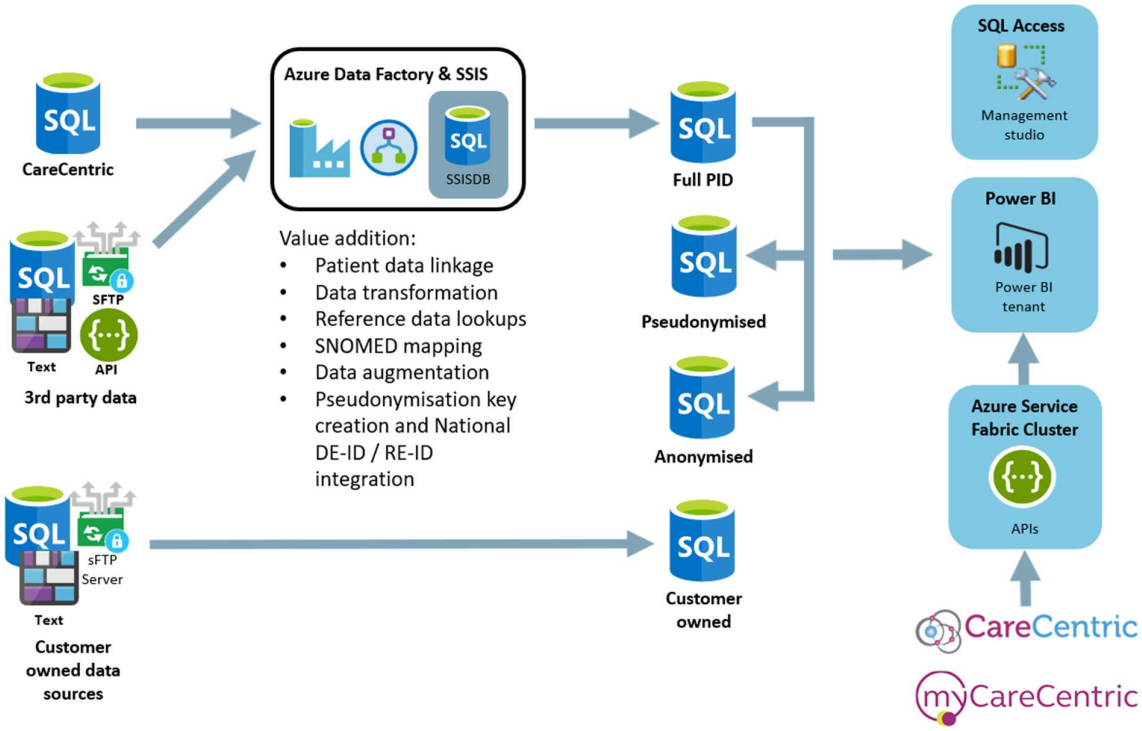
Graphnet have considerable experience in delivering Population Health Intelligence solutions to the NHS. Our CareCentric Population Health Solution is an analytics data platform designed to support integrated health economies with their population health programmes. The solution is integrated with the CareCentric Shared Care Record and surfaces near real time analytics. Data can be incorporated and cross linked from any other available source as required by customers. The combination of the rich data set and analytics tools provided by the Microsoft Azure data platform empower end users to undertake in depth data analysis producing user friendly data visualisations. Data visualisations can be embedded into the CareCentric Shared Care Record and the MyCareCentric Personal Held Record giving decision support to clinicians and patients. The data platform is also available without integration with the Graphnet CareCentric solution.

Our experience in health and social care tells us that it is difficult to deliver a single solution which will be suitable for all population health uses cases. Due to this our approach is to provide a highly configurable platform-based toolset which provides the following functions:

- Fully linked longitudinal citizen record in an analytics focused data warehouse.
- Business Intelligence toolset for creation of dashboards, reports and ad hoc analysis.
- The ability to embed analytics within the CareCentric shared care record and providing access from clinical systems (e.g. EMIS for GP's) as well as from devices such as smart phones and tablets for mobile teams.
- Population analytics features such as cohort mapping, case finding, population segmentation, morbidity profiling, gaps in care analysis, risk stratification, actuarial data sets and predictive modelling.
- Integrated security and data segregation via separate use case-based data marts.
- Multiple out of the box use cases which have been built by or co-developed in conjunction with customers.
- Platform to enable research and data science.

CareCentric BI is a Microsoft Azure cloud-based solution which is hosted in Microsoft UK data centres. Shared Care data is replicated in real time to the Microsoft Azure simple databases

which are a mirror of the live CareCentric shared care record application data. The Shared Care Record data is then further augmented using additional wider determinants data sources, transformed and processed into three separate use case-based data marts:



- **Direct Care Data Mart** – Full citizen identifiable data designed for use as part of direct care analytics for example, case finding, patient timelines or patient summary reports.
- **Pseudonymised Data Mart** – For secondary uses purposes. Can be linked back to identify the citizen with the correct security access. Will use the National DE-ID / RE-ID solution by NHS Digital were enabled.
- **Anonymised Data Mart** – Enables analysis and sharing of the data for research purposes via a de-identified health data mart.

The three primary data marts are supplemented by a Customer Owned Data Mart. This is an empty database for the customer to import their own third-party data, reference data or create data snapshots for analysis.

Access to the data marts is managed using strict role-based access meaning that only users with the correct authorisation can see patient identifiable data. The patient level data mart schemas are mostly identical meaning that population analytics and solutions developed by

analysts can take place on the anonymous or pseudonymised data marts but can be deployed for clinical use by simply transposing to the direct care data mart. This is especially effective for developing and deploying advanced case finding solutions for clinicians.

The solution already contains data from across the Health and Social care economy with examples including.

- **Master patient index, Primary Care, Acute, Community Service, Mental Health, 111, Out of Hours, Results, Social Care,**
- **Secondary Uses Services (SUS), Out of hours, indices of deprivation, Public health Profile Local Health fingertips data,**
- **Acorn risk stratification data,**
- **Johns Hopkins ACG system risk stratification and Electronic frailty index data (EFI).**

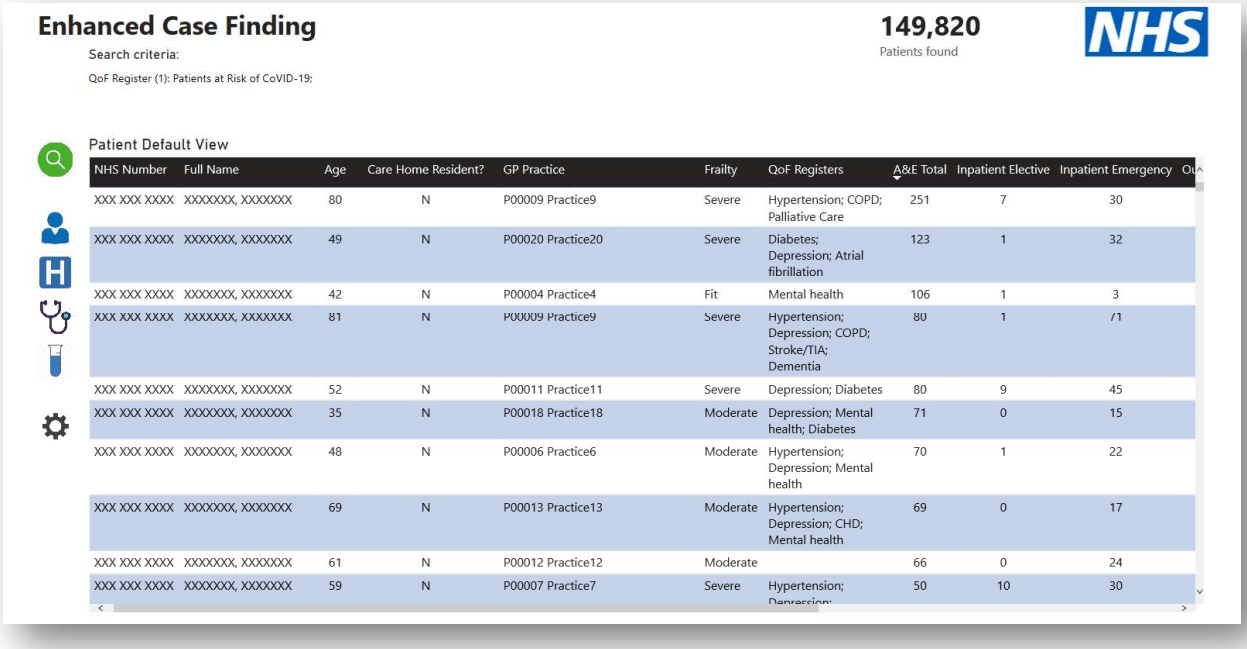
The roadmap includes expanding this data to as much wider determinant data as possible to keep enhancing the solution for additional use cases such as DEFR AQMA data to target areas with high air pollution with high respiratory prevalence for example.

2.1 The CareCentric Population Health Analytics suite

2.1.1 Example use case – Enhanced case finding

The CareCentric Population Health Analytics solution has a library of analytics use cases. The enhanced case finding tool is deployed using Microsoft Power BI.

- It provides organisations with the capability to create large scale patient searches over the data set to a user defined criteria.
- Data sources include:
  - Primary care data (including disease, prescriptions and activity).
  - Live secondary care data (including live activity, diagnostics and procedures).
  - SUS data (activity, diagnostics and procedures)
  - Users can create searches on disease, drugs, demographics and activity enabling sophisticated identification of patients at need.



NHS Number	Full Name	Age	Care Home Resident?	GP Practice	Frailty	QoF Registers	A&E Total	Inpatient Elective	Inpatient Emergency	Ou
XXX XXX XXXX	XXXXXXX, XXXXXXX	80	N	P00009 Practice9	Severe	Hypertension; COPD; Palliative Care	251	7	30	
XXX XXX XXXX	XXXXXXX, XXXXXXX	49	N	P00020 Practice20	Severe	Diabetes; Depression; Atrial fibrillation	123	1	32	
XXX XXX XXXX	XXXXXXX, XXXXXXX	42	N	P00004 Practice4	Fit	Mental health	106	1	3	
XXX XXX XXXX	XXXXXXX, XXXXXXX	81	N	P00009 Practice9	Severe	Hypertension; Depression; COPD; Stroke/TIA; Dementia	80	1	71	
XXX XXX XXXX	XXXXXXX, XXXXXXX	52	N	P00011 Practice11	Severe	Depression; Diabetes	80	9	45	
XXX XXX XXXX	XXXXXXX, XXXXXXX	35	N	P00018 Practice18	Moderate	Depression; Mental health; Diabetes	71	0	15	
XXX XXX XXXX	XXXXXXX, XXXXXXX	48	N	P00006 Practice6	Moderate	Hypertension; Depression; Mental health	70	1	22	
XXX XXX XXXX	XXXXXXX, XXXXXXX	69	N	P00013 Practice13	Moderate	Hypertension; Depression; CHD; Mental health	69	0	17	
XXX XXX XXXX	XXXXXXX, XXXXXXX	61	N	P00012 Practice12	Moderate		66	0	24	
XXX XXX XXXX	XXXXXXX, XXXXXXX	59	N	P00007 Practice7	Severe	Hypertension; Depression;	50	10	30	

2.1.2 Non-Functional

As a long-standing supplier to the NHS, Graphnet is committed to complying with all relevant national standards and guidance, as well as legal and legislative requirements to ensure the safety and security of data. These include: Continually striving for compliance with the Data Protection Act 2018, ISO 27001:2013/9001:2015 certificated, DSP Toolkit, Cyber Essentials Plus and DSB0129. We are also compliant with PRSB standards and EPaCCS SCCI180 for our Integrated Care & Support Plans and End of Life planning.

We comply with all relevant legal requirements including those under the Data Protection Act 2018 and the General Data Protection Regulations relating to the processing of personal data/ special category data (e.g. where we host data or if we need to process it whilst implementing or supporting our software). We have designated staff to monitor and maintain high IG standards, ensuring our solutions and workforce responsibly comply with GDPR and Data Protection Act 2018.

We maintain all relevant certifications. Graphnet are certified under both ISO27001:2015 and ISO9001.

We also maintain our own third-party accreditation scheme for IT partners and suppliers to ensure that they comply with the necessary IMT security, data and protocol standards.

CareCentric Population Health predominantly provides a stored extract of source information from external third-party applications. All data is transported using SSL encrypted links and then stored in a secure database, which is typically hosted in the Microsoft Azure cloud. We routinely commission independent penetration testing of the CareCentric solution.

Graphnet follows a standard ITIL deployment methodology which includes: Change Advisory Board; Release Documentation; Release Management Control; Capacity Management; Impact Assessment; User Acceptance Test and Customer sign off. We have also adopted Scaled Agile Framework (SAFe), which employs an AGILE methodology for software development and patch releases.

Our Service Desk provides a second line incident triage and helpdesk service and operates to ITIL principles, reviewing incidents and identifying problems in accordance with internal protocols. We use an ITIL focused call logging application (JIRA) to record details of all fault calls and support incident management.

3 Details of the level of backup/restore and disaster recovery that will be provided

Graphnet employs a multi-layer approach to Business Continuity and Disaster Recovery for the hosted CareCentric Population Health solution. We have a well-developed, formal Business Continuity plan, which has been audited as part of our ISO9001 accreditation and annual review. This plan identifies key resources and contingencies required in the event of a major incident and the preparation and alternatives in place allowing business to be run during the restoration of full services.

Graphnet manages Disaster Recovery (DR) and Business Continuity (BC) arrangements in a structured manner. A DR Plan is in place for every system or product for which there are contractual Disaster Recovery arrangements in place with customers. Business Continuity plans exist to ensure that in the event of a disaster affecting the company's essential business functions, we will be able to continue with standard operations expected by customers. Annual testing and review of both DR and BC plans takes place.

In the event of a major incident, we would use a multi-layer communication approach. Initial identification of problems would be channelled through Service Desk from customer via e-mail/ telephone call/ or through the on-line portal. In line with the jointly agreed Business Continuity Plan, we would advise organisational leads by e-mail, telephone and through messages on the portal as appropriate.

We will assist commissioners and partner organisations to develop and continuously improve business continuity plans in by:

- Sharing our approach that we have used internally, and which has been audited for our ISO accreditation.
- Giving access to our trained quality management staff who are very experienced in business continuity planning.
- Sharing our materials, documents and processes that we use assess risk and plan contingencies.

We also have experience of using structured methods and tools to assess and capture risks so that we can build mitigation and contingency plans. This includes using structured review meetings to look at particular risk areas – e.g. interruption to service, damage or breakage to the core system,

potential periods of increased risk during upgrades etc. We then test the business continuity plan to see that it provides contingency for the identified risks and ensure that business continuity plans are kept up to date with consideration to installation of new functionality, release planning and any major upgrades.

The hosted server environment we deploy is a resilient cloud-based Microsoft Azure platform, which allows real time mirroring of software and data. This a platform already being used to host UK Population Health Analytics solutions and meets hosting requirements outlined for NHS Applications, Services and Data. Accreditations and standards achieved include: Level 2 NHS IG Toolkit assessment; UK Government's Cloud Security Principles; ISO 27001, ISO27018 (planned), HIPAA, FedRAMP, SOC 1 and SOC 2. Microsoft Azure Availability Sets and Availability Zones, which we would propose for our customers cloud-based solution, support published SLA levels of availability of 99.99%. Regarding data protection, the Azure storage resiliency solutions which are part of the core Azure platform, provide storage and data availability to 99.99 (12 9s) to support strict RTO and RPO requirements.

The Azure SQL Database includes mechanisms, policies, and procedures that enable the business to continue operating in the face of disruption, particularly to its computing infrastructure. Azure automatically performs a combination of database backups in order to protect your business from data loss.

4 On-boarding and Off-boarding processes

4.1 On-boarding

Configuration

Our analytics are scalable and highly configurable allowing the same tools and methodologies to be applied to different populations and by different groups of users. For example, a Primary Care Network and Multi Agency Health Transformation Partnership could gain operational insight into where their main pressures are in managing patient care by using the same segmentation model which identifies case mix adjusted cost variance across multiple organisations by patient groups and resource usage. Outlying costs can be investigated further and prompt engagement with those organisation (e.g. why do diabetic patients in practice A attend AED more than those in Practice B and why does Hospital A have a higher first to follow up ratio for respiratory patients compared to hospital B).

Data Migration

Most installations require an element of data migration/extraction; for the purposes of the creation of the initial baseline MPI, using Acute and GP demographic data. This can be further augmented with demographic data from other systems, e.g., community. Graphnet has a team of experienced data migration specialists who work with our customers to fulfil this activity during implementation.

We will work closely with the customer to establish and agree the following:

- The scope of the work required
- Individual and joint responsibilities within the workstream
- The plan and optimum phasing of activities.

4.1.1 Important Note

Please note that implementation services are not included within the Pricing Document and therefore must be scoped and priced separately. This is because due to the very specific and individual nature of each project and each customer's requirements, this makes it impossible to charge a standard fee for these critically important services.

4.2 Off-boarding

At the end of the contract term, Graphnet will work with the Buyer to agree an exit plan. As a responsible provider, Graphnet is aware of our obligations with regard to the management and retention of data, both during the term of the contract and when the contract concludes. The Population Health Analytics solution is replicating or re-presenting data which is held in other source systems (such as an Acute PAS or GP system). These are the master systems holding the original data and we understand that the data in these systems must be protected at contract end.

5 Service Management Details

Graphnet's service technical support and maintenance services includes:

- Software support and maintenance for Graphnet's solutions via a second line incident triage and helpdesk service
- Support releases which will be deployed as patch updates and may include fixes to several reported faults, or one or more new features.

The service includes second and third line technical support with agreed service levels which will cover response, availability and issue resolution.

Methodologies employed in supplying and maintaining an effective service, and in deploying system upgrades, are based upon the ITIL framework, particularly in regard to Incident and Problem management, Configuration, Change Control and Service Level management.

The service includes the provision of an Account Executive (AccExec) who acts as a point of contact for the Buyer in respect to the service provided and is the typical conduit for Service Request Management. The AccExec works alongside the Programme team and Commercial and Services Director who will progress requests for change and deal with any commercial issues. The AccExec and Commercial Service

Director's role includes providing comprehensive service reports relating to the performance monitoring system which covers the service as well as regular ad-hoc updates regarding any current incidents and problems under investigation.

The Service Management operation is fully aligned to ITIL principles reviewing incidents and identifying problems in accordance with internal protocols. The helpdesk processes are regularly reviewed as part of the overall Quality & Security Management System which is certified to ISO 9001:2015 and ISO 27001:2015 standards.

5.1 Incident Management/ Problem Management

Graphnet uses JIRA™ incident management software to manage its helpdesk and track all reported software issues and change requests.

Issues and requests can be logged via the JIRA online portal, telephone or email. Buyers provide an agreed minimum specification of supporting information in order that we can act upon and provide resolutions to issues raised efficiently. Issues raised are prioritised and

allocated a unique reference number to facilitate tracking and management. If calls need to be referred to third party support (for example to Microsoft or other system software which is used in our solution), Graphnet will maintain responsibility for monitoring the progress of the call until closure.

Regular service review meetings are undertaken with Buyer and Graphnet representatives, including the Buyer's appointed Service Delivery Director, to monitor Service Levels, review problems, understand root cause analysis and manage any process issues between helpdesks.

5.2 Change Control

Graphnet has a standard Change Control process based on ITIL principles. The full process and governance for managing and approving change requests is documented in the Project Initiation Document. The JIRA case management system is used to log change requests. This is typically done by the Buyer's appointed Service Delivery Director, who will also track and manage requests and updates on the Buyer's behalf.

The request will be reviewed and assessed, with full details and associated costs/timescales fed back as promptly as possible.

Graphnet development is carried out in an Agile environment, which allows for a more flexible and responsive design, development and testing approach, enabling rapid release of requested changes.

5.3 The Role of the User Groups

Graphnet users provide valued contributions in the solution development direction and help influence the product roadmap, both through the formal Change Control processes described above, as well as through our bi-annual User Group meetings and other contacts with Graphnet staff.

5.4 Software Upgrades

We deploy new versions of our tools using a continuous delivery approach in line with our agile development methodology. We also ensure the integrity of any deployed release by using source control software and testing to ensure the validity of code. This ensures that new functionality, bug fixes and enhancements get to customers rapidly. We co-ordinate with project managers to ensure that our deployment releases are authorised and agreed within customer change management processes. As standard practice we deploy releases to a customer test

environment prior to any live production upgrades.

Use case-based visualisations follow a separate process. Our data analysts can support stakeholders by deploying dashboards or reports individually widely to identified users and to agreed schedules. Authorised analysts within the authority have the capability to design, develop and deploy reports autonomously without Alliance involvement.

6 Service Constraints

Each of the core and optional elements of the system are described in Section 1 of this document and outlined in the accompanying Pricing Information. The service provided will include the current release of the elements of the CareCentric Population Health analytics solution contracted for use by the customer.

The solution pricing is based on a standard, core configuration and “out of the box” functionality consistent with the latest product releases.

Graphnet can provide a full range of implementation services, which will be specified and priced upon request. This includes the following implementation services:

- Programme and Project Management.
- System configuration and functional/product expertise.
- Data migration.
- Integration and interfacing.
- Training.
- Management information and reporting.
- Change and benefits management.
- Other services and resources such as go-live support temporary customer-side resources. Planned downtime is kept to a minimum, usually needed only for new major Release Updates. Graphnet will always plan and agree such scheduled downtime with the Buyer in advance.

7 Service Levels

7.1 Availability

The hosted server environment we deploy is a resilient cloud-based Microsoft Azure platform, which allows real time mirroring of software and data. This a platform already being used to host UK Population Health Analyics solutions and meets hosting requirements outlined for NHS Applications, Services and Data. Accreditations and standards achieved include: Level 2 NHS IG Toolkit assessment; UK Government's Cloud Security Principles; ISO 27001, ISO27018 (planned), HIPAA, FedRAMP, SOC 1 and SOC 2. Microsoft Azure Availability Sets and Availability Zones, which we would propose for our customers cloud-based solution, support published SLA levels of availability of 99.99%. Regarding data protection, the Azure storage resiliency solutions which are part of the core Azure platform, provide storage and data availability to 99.99 (12 9s) to support strict RTO and RPO requirements.

The Azure SQL Database includes mechanisms, policies, and procedures that enable the business to continue operating in the face of disruption, particularly to its computing infrastructure. Azure automatically performs a combination of database backups in order to protect your business from data loss.

7.2 Performance

Graphnet provides a number of tools to support performance, incident and response monitoring and reporting as part of our comprehensive Service Management package included within our contracts.

As part of this service, Graphnet provide:

- active monitoring of the solution performance, faults and availability
- monitoring of and support for all interfaces
- System performance is reported to Buyers as part of regular Service Review meetings and formal monthly reporting.

7.3 Incident response and resolution

Our aim is to respond to incidents quickly and effectively and to resolve incidents as quickly as possible to avoid the disruption and difficulties which such incidents may cause. Full details of response and resolution are detailed in the Graphnet Service Level Agreement.

7.4 Support Hours

The standard Period of Support overs the hours from 09:00 to 17:30 Monday to Friday excluding all Bank Holidays. Graphnet also offer extended support hours or 24x7 as a further service subject to additional charges.

8 Training

Our approach to training starts with early stakeholder engagement as this is critical to successful adoption of any service. This will allow the uses and benefits of the service to be fully understood and enable an effective strategy for targeting the 'hearts and minds' of those key stakeholders from across the healthcare system (clinicians / commissioners / providers). This is an important step as it paves the way for successful training and developing the uptake of the tool. If end users understand the overall strategy and how they and their organisation fit into the strategy it is easier to create sustained use.

The Alliance has standard training materials for core elements of the system, however before embarking on any training programme it is important to perform a training needs assessment so these resources can be tailored to fit the requirements of the customer. Training will be rolled out in partnership with the customer using a variety of methods, including face-to-face coaching or formal training sessions, train the trainer, webinars, recorded sessions, training video links on reports and written material.

Specialist detailed training would also be delivered to key groups including, but not limited to, data deep dives, data translation, risk stratification and population segmentation.

We see training being a constant workstream throughout the project lifetime to ensure all staff are constantly being upskilled in the use of the system.

Evaluation of the training will also be key to ensure we are providing the right training to the right people. This will take place using formal and informal feedback from training attendees. Any feedback provided will be shared with the customer and any identified improvements to the training program and organisation knowledge transfer plan will be implemented as necessary.

9 Ordering and Invoicing Process

Our ordering and invoicing process is as follows:

- The Buyer raises a purchase order to cover all of the charges agreed under the contract
- The Buyer and supplier to sign an order form which details the specific scope of the service to be delivered for the Buyer. The Graphnet will draft the order form.
- Graphnet invoices the Buyer in accordance with the timescales specified for different components of the services. This will vary from Buyer to Buyer, but under a SaaS model, we will typically invoice the Buyer for the services monthly, from the date of go-live and until the end of the contract term.
- Buyers may also elect to profile capital payments (for software licences and implementation services) against agreed delivery milestones during the deployment period, with service charges invoiced from go-live as above.
- Each invoice is sent to the approved Buyer's address (such as the finance department) and contains appropriate information to identify the element/s of the service to which it relates.
- Invoice shall where necessary be accompanied by sufficient supporting documentation.

10 Payment Terms

Graphnet's standard payment terms are within thirty days of receipt of a valid invoice.

10.1 Disputed Invoicing

If the Customer disputes all or any part of an invoice, the undisputed amount of the invoice must be paid whilst the disputed part is investigated by both parties.

11 Termination Terms

Graphnet offers its customers termination rights in line with industry standards, such as the Buyer's right to terminate should the supplier be in material default, commit a material and irremediable breach of the contract, be insolvent or in default of Protection of Personal Data, Confidentiality or the Security Policy and so on. Our policy is in line with standard government provisions.

12 Data Restoration / Service Migration

12.1 Data Restore

All data transactions are archived and can be rolled back if required using the restore of SQL transaction logs.

As part of a cloud service, Graphnet would use SAN snapshot rollback methods in order to recover from severe data or hardware failure.

Using these virtualisation techniques and SAN based replication, Buyers can expect to achieve very short Recovery time (RTO) and recovery point objectives (RPO) for the system ensuring a speedy return to service in the unlikely event of a disaster occurring.

For data loss caused by the Buyer, Graphnet may charge the Buyer on a time and material basis the cost for work associated with data recovery.

12.2 Service Migration / Exit

At the end of the contract term, Graphnet will work with the Buyer to agree an exit plan, including the migration of data from the system and the decommissioning of any cloud based services provided under the contract. Refer also to section 3.2.

13 Buyer Responsibilities

Buyer responsibilities depend on the scope of solution /services being provided. Typical Buyer responsibilities are summarised below:

13.1 General Obligations

- To perform its obligations and provide suitable numbers of suitably qualified staff, as well as access to those staff by the Supplier
- To provide such documentation, data and/or other information that the Supplier reasonably requests
- To make available to the Supplier premises, facilities, relevant ICT systems etc.
- To provide suitable on-site accommodation including vehicle access, desk space, telephones and network/Wi-Fi access for the Supplier staff.

13.2 Management and Direction

- To adhere to the PRINCE2 project management methodology
- To provide a programme manager, one or more project managers and a range of staff (the job roles for which will be agreed in advance) to undertake a range of tasks and roles (agreed in the contract) covering both the implementation period as well as the live usage period to the end of the contract term
- To agree appropriate joint project governance with the Supplier and to ensure senior level input (including clinicians) to the Project Board
- To provide staff during the implementation period who will be responsible for the design, configuration and build (under the guidance of the Supplier), and for the subsequent operation and maintenance, of elements of the Supplier Software.

13.3 Testing and Acceptance

- To evaluate the Supplier Software to ensure that it meets user requirements in accordance with the agreed Testing
- To provide sufficient testing resources to undertake UAT and other Buyer testing as required
- To develop and document Test scripts

13.4 System Management

- To provide skilled resource(s) to undertake system administration of the system on behalf of the Buyer
- Housekeeping tasks including requesting new users and their access rights
- To make available to Buyer's staff copies of the correct operating instructions for proper use and care of the Supplier Software
- To ensure remote access to the System is always available for the Supplier and its Sub- contractors.
- To actively scan and monitor for suspicious events and virus control according to the Security Management Plan.

13.5 Support Services

- To provide 24x7 first line support and second line help desk support services
- To collect the necessary minimum data and/or supporting information required for the identification, replication and resolution of faults and to have the necessary training and skills to enable problem identification between hardware, network and application so that the call can be resolved internally or logged with the appropriate supplier
- To ensure that calls are logged and passed to the Supplier via approved methods and to maintain a log identifying the date and time logged, priority and current status
- To make the Supplier aware of all local changes affecting the operation of the system including system configuration and technical infrastructure changes; and
    - To provide a point of contact to interface with the Supplier in relation to the performance monitoring system including involvement in service reviews.

13.6 Infrastructure, Networking and end user Devices

- To provide the necessary local networking infrastructure to connect to the solution.
- To provide all necessary end user devices, PCs, laptops, mobile devices, peripherals, printers, print servers and bar code scanners, including configuring the Supplier Software to access such devices.

- To provide end user workstation to an agreed minimum specification, and to agree to update the minimum specification from time to time in line with the necessary technological development required in order for improved functionality to be incorporated into the Software and to preserve its supportability.
- To identify and make arrangements for Supplier's personnel to avoid or be protected from any health hazards and to take all reasonable precautions to protect the health and safety of the Supplier's personnel whilst on the Buyer's premises.

13.7 End User Training

- To provide and host all end user training including any general PC skills training as well as training on the Supplier's Applications, both during the initial implementation and thereafter, and to ensure that the correct staff attend the courses.
- To provide suitably experienced Trainers to attend the Supplier's "Train the Trainer" training

  sessions.
- To localise and customise the standard training materials provided by the Supplier;

13.8 Data Migration

Most CareCentric installations require an element of data migration/extraction; for the purposes of the creation of the initial baseline MPI, using Acute and GP demographic data. This can be further augmented with demographic data from other systems, e.g., community. Graphnet has a team of experienced data migration specialists who work with our customers to fulfil this activity during implementation.

We will work closely with the Buyer to establish and agree the following:

- The scope of the work required
- Individual and joint responsibilities within the workstream
- The plan and optimum phasing of activities

13.9 Interfacing and Integration with Legacy Systems

- To provide and operate interfaces between the Buyer's legacy applications and the Buyer's integration engine and the Supplier's integration engine, including the provision of suitable test environment/s.

To provide the following interfacing support services:

- first line support to triage the problem to diagnose where the problem lies (i.e. on which side of the interface) should an interface stop or not be working satisfactorily
- communicating the fault to the Supplier using the standard helpdesk procedures; and
- ensuring that no changes (such as upgrades) to the Buyer's legacy systems adversely affect the interface to the Supplier Software and if this is likely then to notify the Supplier in a timely way so that necessary work and testing can be undertaken under the Change Control Procedure.

To procure for the Supplier.

- access to any legacy system/s with which the Supplier Software interoperates, and to bear any third-party costs associated with this
- be responsible for ensuring that data sharing agreements and associated information governance requirements are met so that any patient identifiable data shared with the service is done so with the correct approvals, consent and sanctions.
- agreements as to the patient consent model with appropriate governance bodies.

14 Technical Requirements

Graphnet will discuss individual Buyer requirements (on a case by case scenario) regarding all Technical specifications, as this will be dependent on the scope of the project and the number of organisations contributing to the Population Health Analytics solution. A basic guideline to minimum requirements is stated below but is only given as a guideline and would be subject to review with the Buyer.

For analysts using the tools to query the solution or develop dashboards and reports:

Processor:	x64 Processor: 2.0 GHz or above AMD Opteron, AMD Athlon 64, Intel Xeon with Intel EM64T support, Intel Pentium IV with EM64T support
Memory:	4GB
Disk Size:	1GB Free disk space
Software:	Windows 8 or above .NET 4.7
	1920 x 1080 recommended capable display
	IE10 or later Google Chrome Firefox Microsoft Edge Apple iPad 3 and above, iOS 9 Android: 4.4 (KitKat) and above

For end users:

Any device that can run a modern web browser	IE10 or later Google Chrome Firefox Microsoft Edge Apple iPad 3 and above, iOS 9 Android: 4.4 (KitKat) and above

14.1 Details of any trial service available

Trial services of Graphnet's solution and other products described under the G-Cloud framework are not available.

14.2 Sub-Contractors

Graphnet has the necessary and appropriate products, services, experience and skills to provide, implement, host and support the implementation of the

CareCentric Population Health solution. Should the Buyer have specialist requirements not met by Graphnet's products and services portfolio then we would expect to sub-contract such services as required. Graphnet has a number of years' experience in managing sub- contractors in this manner to meet contractual requirements.