RioMed
EST. 1997

Cellma User App

Cellma Patient App

cellma

cellmaflex
Better Help, Better Health!

Referral Portal

Vaccine

Dashboards

Patient Portal

RIOMED LTD – G-CLOUD FRAMEWORK

SERVICE DEFINITION

SAFE . EFFICIENT . QUALITY

WORLD CLASS HEALTHCARE SOLUTION

SAFE. EFFICIENT. QUALITY.

WORLD CLASS ELECTRONIC HEALTHCARE SOLUTION

DOCUMENT CONTROL

DOCUMENT LOCATION

The source of the document will be found in location:

Sharedrive

Subsequent versions of this document will be found in the same folder.

REVISION HISTORY

Revision date	Version	Summary of Changes	Author
20/6/16	1.0	Final Submitted Document	Ekta Chandwani, Business Development
29/4/19	2.0	Final updated version for submission	Ekta Chandwani
1/5/2021	3.0	Final updated version for submission	Ekta Chandwani
1/5/2024	4.0	Final updated version for submission	Ekta Chandwani
28/6/2026	5.0	Final updated version for submission	Ekta Chandwani

APPROVALS

Version 1.0 and above of document requires the following approvals:

Name	Signature	Title	Date of Issue	Version
Mario Mohammed		Mr.	23/6/2016	1.0
Mario Mohammed		Mr	1/5/2019	2.0
Mario Mohammed		Mr	1/5/2021	3.0
Mario Mohammed		Mr	1/5/2024	4.0
Mario Mohammed		Mr	28/1/2026	5.0

Approval records are held electronically by the PMO.

DISTRIBUTION

This version of this document has been distributed to:

Name	Title / Job Responsibility	Issue Date
G-Cloud Framework	n/a	23/6/2016
G-Cloud Framework	n/a	29/4/2019
G-Cloud Framework	n/a	15/7/2021
G-Cloud Framework 14	n/a	06/05/2024
G-Cloud Framework 15	n/a	28/01/2026

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ABOUT RIOMED

Established in 1997, RioMed has been delivering world class software solutions to major healthcare organisations across the United Kingdom, Republic of Ireland, the Middle East, India and the Caribbean for over 28 years.

Originally founded on the principle of 'working to improve healthcare', all of RioMed's exemplary solutions are clinically driven and developed to provide a step by step approach to seamless, integrated, electronic healthcare.

RioMed provides key software services to over 30+ NHS Trusts, 10 Irish Hospitals and over 50 sites in the Caribbean and around the world. RioMed's software has been repeatedly proven to work above and beyond clinical, managerial and IT expectations in whatever clinical setting it is deployed.

RioMed is proud to be a versatile international company employing highly skilled, passionate individuals from across the globe.

RioMed's flagship software is Cellma with over 30,000 individual users logging into Cellma each week. Cellma now holds over 20 million electronic patient records. Cellma is used in a variety of healthcare settings to manage the delivery of services.

Healthcare professionals can login and view patient records from remote locations, while patients can login using their phones, tablets or laptops to view their clinical record and complete additional tasks such as appointment booking, repeat prescriptions and secure chat.

WHAT IS CELLMA?

Cellma is a cutting-edge health information system designed to provide dynamic and integrated digital solutions to effectively manage all aspects of healthcare and promote the transition to a truly 'paperless' infrastructure. The need to capture, share and use information digitally and securely enables an organisation to provide exceptional improvements to the quality, safety and efficiency of healthcare services. Our recognition of the 'One Patient, One Record' philosophy underpins all aspects of Cellma, bringing together the latest technologies in healthcare and computing.

Cellma is a cloud-based, modular solutions suitable for all healthcare settings regardless of size. The modules can be used individually, seamlessly together or integrated with 3rd party solutions using interfaces developed by our skilled team of integration specialists. Being cloud based it can be accessed from any device where there is Wi-Fi, 3G or 4G connection.

CELLMA – MODULAR SERVICE PROVISION



Figure 1: Modules of Cellma

SERVICE FEATURES/DESCRIPTION

- Patient Administration & Scheduling (PAS)
- Electronic Patient Record (EPR) and Letter Generation
- E-pharmacy/ePharmacy/SACT Chemotherapy Prescribing
- Order Comms – eLabs (Lab system/interfacing)
- Order Comms - Imaging (RIS/PACS system/interfacing)
- Ward & Bed Management
- Supplies & Inventory Management
- Business Intelligence & Reporting
- Commissioning, Cost tracking & Finance
- Patient Portal & online access (incl. Patient Feedback, Online Registration, iPROMs / iPREMs)
- Document Management
- Assessments, letters

ADDITIONAL SERVICE PROVISION

- HR Module
- Dietetics
- Maintenance
- Porter
- Data Migration
- Integration
- A&E Module with Early Warning score monitoring and recording

SERVICE BENEFITS

- Web-based remote access
- Approved HSCN and HSE Provider
- Specialist integration and interoperability using NHS defined toolkits, incl. FHIR HL7
- Off-the-shelf or tailored and customised implementation
- Email, local, statutory, accreditation and dashboard reporting automatically available
- iOS and Android registered App for Patients and Users
- Value-added project and change management consultancy
- 24/7 Service Desk Support and Maintenance
- Data hosting through partner programme with Tier 3 data centre
- Data sharing across primary, community, secondary and tertiary care

WHO IS CELLMA FOR?

- Acute Hospitals
- Community clinics
- Pharmacies
- Allied Health Professionals
- Patients
- Private Practice including private consultant consortiums
- Occupational Health

HOW DOES CELLMA PERFORM?

The modular arrangement can be configured to meet complex and specific requirements. This bespoke customisation provides organisations with a scalable solution to meet all clinical and managerial requirements. Any number of Cellma modules can be used by a single healthcare facility, group practices, or an entire health network, in any given speciality. Cellma is a web-based application configured to operate at 99.5% availability. It can be accessed anytime, from anywhere on any platform or device.

WHAT MAKES CELLMA UNIQUE?

Tailored to client's specific requirements, Cellma features user friendly screens to enable rapid data input at the point of contact on any platform, saving staff time. Adaptable for both generalist and specialist services, all information held within Cellma is coded using CPT, SNOMED CT, ICD-10/11 or OPCS- 4 codes which can be mapped to national or local systems in place for reporting or billing requirements. Cellma's embedded integration engine uses FHIR HL7, DICOM, HL7, JDBC, ODBC, SOAP, XML or bespoke messaging in order to communicate with any system across a local or wide area network. Patient involvement is greatly encouraged in Cellma through self-registration and triage facilities, and automatic alerts generation, driving information to the patient.

WHY SHOULD YOU USE CELLMA?

Cellma provides the framework and tools required to move to a complete digital health environment. It allows healthcare services to be integrated over wide area networks using web technologies. Our modules provide a comprehensive solution to manage an entire health economy from registration to discharge. Patient involvement is encouraged through our online patient portal and patient app, which can facilitate early discharge using our patient communicated tools. Patients can log into Cellma update and print their records, book appointments, request repeat prescriptions, provide feedback and complete their Patient Recorded Outcome Measures (PROMs). Alerts can be sent to patients to remind them of appointments, vaccinations, preventative screening and test results using text or email.

DETAILED BENEFITS OF CELLMA

The following table summarises common Cellma Benefits:

Common Areas of Cellma Benefits	
Policy or legal requirement	• Compliance with WHO and PAHO guidelines • Patient Satisfaction surveys and other reported outcome measures. • Compliance to local guidelines for the management of patients • Allow all services to adopt the principle of one patient one record • Prints data for the case notes in readable format.
Quality of service	• Standardised assessments and letters are used by healthcare professionals across the whole service • Promotes service improvement through patient feedback from PROMs and PREMs. • All information captured is coded using ICD 10/11, CPT and SNOMED CT codes, to allow collapsing into larger datasets for reporting as well as research. • Provides audit reports for clinical governance and service improvements.
Internal management	• All patient information can be accessed at the point where the patient is being seen, this improves decision making and outcomes for patients. • The ability to allocate clinical and administrative resources based on need • Allows the creation of disease registers • Reduces secretarial time required to produce letters from dictate tapes • Provides alerts to ensure follow-up of patients • Provides patient level costing to calculate the actual cost of services provided, which will help in contract negotiation • Generate reports to meet statutory and local requirements.
Process improvement (Efficiency gains)	• Prevents duplication of effort by the multidisciplinary team • Provides secretarial cost savings • Eliminates time lost looking for case notes and letters. • Promotes vial sharing in infusion clinics and reduces biologics cost • Reduces DNA's through text and email reminders • Reduces re-ordering on investigations as notes and results are more readily available • Using text and email reduces cost of postage, telephone calls and staff time associated ART monitoring. • Letters sent out to GPs within 24 hours of patients being seen.
Personnel or HR management	• The users of Cellma report high levels of satisfaction in carrying out their clinical practice, which leads to greater productivity within each service. • The flexibility of having all information when and where you need it allows remote working across many sites without the need for transporting case notes and patient files.
Risk reduction	• Flags when reviews of medications and investigations are due for the monitoring of high risk patients • Alerts can be sent by text and email if patients' results are outside normal ranges. • Reduces prescription errors when the ePrescribing module is being used • Integrates with existing systems for lab results. • Reduces errors associated with transcribing of patients notes through dictation and data entry from paper based forms and templates.
Flexibility	• The flexibility of having all information when and where you need it, allows remote access across many sites without the need for transporting case notes and patient files. • Real time access to information 24/7 regardless of where you are in the hospital, at a remote clinic or at home • Allows difficult cases to be discussed with clinicians at different locations, via telephone or other online forums.

	• The ability to produce and retrieve reports as and when required.
Economy	• Provides the ability to adapt to changes in practice and organisational changes faster e.g. emailing letters for referrals, commissioning requirements, reporting etc. • Allows services to accurately identify areas for cost improvement through management audits and reports. • Allows telephones to be used for follow-up clinics, reducing the need for face to face contact.
Revenue enhancement	• Allows best tariff prices to be obtained for procedures as all comorbidities are recorded through standard assessment template • Healthcare services can attract research funding.. • Allows nursing time spent managing helplines to be accurately measured, and costed for reimbursements
Strategic fit	• Cellma allows services to adapt to changes in organisational and operational strategies required to improve the quality, safety and efficiency of services provided. • Allows services to move to electronic patient records and thereafter a paperless environment.

Table 1: Common Areas of Cellma Benefits

RIOMED'S 10 STEP IMPLEMENTATION PROCESS - OVERVIEW

The RioMed 10 Step Implementation Process has been designed to enable the successful deployments of Cellma from the time of contract through to set-up, design, customisation, training and Go Live. The overall process is broken down into 10 distinct steps. Before each step can be initiated, the previous step must have been signed off by the appropriate personnel from both the customer and RioMed.

The 10 Step Installation process is for every new installation of Cellma. It has two purposes:

1. A guide to understanding and implementing all the steps involved for the process to proceed from one step to the next in an incremental manner.
2. A tool to record when the resources and actions have been collected or completed and should be filled out as the project progresses to provide an accurate record of all aspects of the installation.

Each step follows the same pattern; firstly, the objectives of the step are set out followed by tables listing the requirements for each aspect. The tables are designed as a record to be filled out as each item is completed and comments added as required. The following flow chart describes the processes covered in each step.

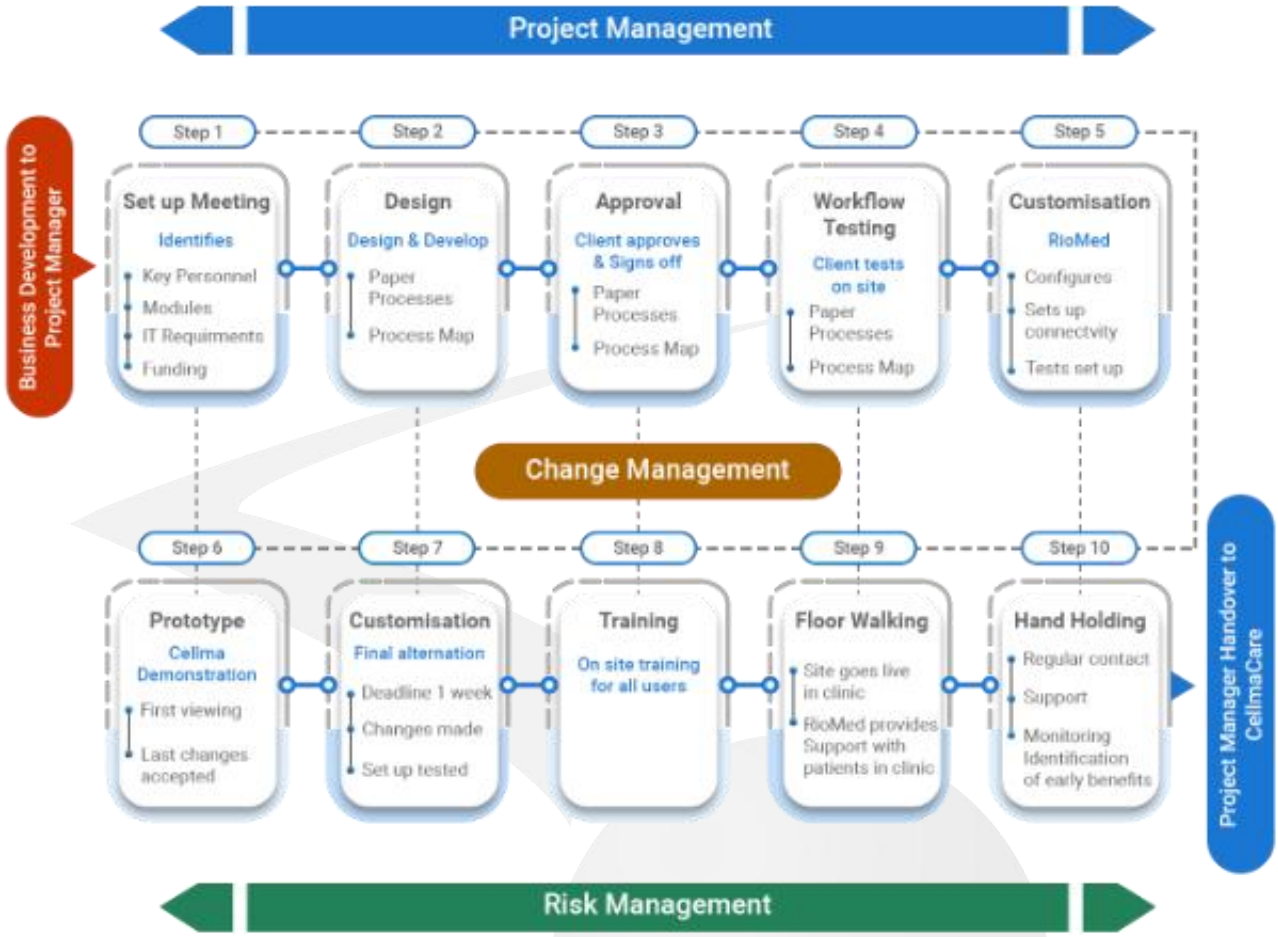


Figure 2: RioMed's 10 Step Implementation Process

Project Managers

RioMed's Project Management rigour is indispensable for a competent and disciplined implementation that provides different healthcare environments with a customised plan. Key to this implementation is our project management team who possess an abundance of experience in the healthcare sector. They are trained to provide close supervision, real-time response and support of capacity building within the health environment.

RioMed Ltd, adheres to the PRINCE2 Methodologies (Projects in controlled environments, project management framework), which offers best practice guidance, not only across the UK public sector, but also in the private sector and internationally.

Furthermore, our management approach is flexible and delivers an outstanding service in alignment with the rapidly changing clinical demands and cost constraints within the health services. We utilise a consistent set of activities in the implementation process, in order to maintain project momentum, where single points of responsibility are created - Project Leads.

Our project management approach focuses on business requirements and processes that are broken down into phased, controllable stages, where attention to resources is of paramount importance; as instructed by the PRINCE2 Methodologies that we adhere to implement through our 10 Step Process.

Risk and Change Management

Successful implementation of Cellma depends on the site's willingness to address the Change Management Processes that will need to be implemented as part of the installation process. Each step identifies potential project risks. These should be discussed along with any other issues that might be identified so that all project risks can be addressed, and strategies agreed in advance to overcome them.

Each phase is launched by analysis of user requirements, site readiness assessments; user competency audits and detailed implementation planning. The plan includes risk management, change management, user acceptance testing, training, on-going support and sustainability.

Once the plan is agreed locally the implementation begins. These stages are described in detail in the following section of this document.

The scope of the implementation is outlined below and detailed in stages 1 to 10 as follows:

The key steps/stages are listed below:

- Step 1 Analysis
- Step 2 Design
- Step 3 Approval
- Step 4 Workflow testing
- Step 5 Customisation
- Step 6 Prototype
- Step 7 Alterations and UAT
- Step 8 Training
- Step 9 Floor walking
- Step 10 Handholding

STEP 1: Set-up Meeting and Analysis

Our Business Development Manager will visit to discuss your detailed requirements and collect all relevant information that will help us to match Cellma to your requirements.

Information collected will include, but not be limited to the following items:

- Verification of information
- Copies of site paper/existing digital assessments/forms/reports
- Discuss and agree changes required for the assessment(s)/forms/reports
- Copies of required letters for inclusion in Cellma

- Site's requirements for:
    - Design of assessment tools and materials
    - Data Migration and Interface connections
- Collection of other pertinent information for Cellma customisation
- Identification of names and roles of proposed users on-site
- Reporting requirements
- Letter requirements

The Business Development Manager will complete this set-up meeting by establishing a date for sending the site a paper document outlining how the site's information will appear in Cellma.

STEP 2: Design

A critical phase of the design process will be gathering the site's requirements. The Project Manager will develop a paper scheme of how the information collected in Step 1 will look in Cellma.

Data migration and interface connections will be included in the design. RioMed has detailed the integration and data migration processes in detail in RioMed's responses to Questions 5 and 6

respectively. On a high level, RioMed will specifically run through the following processes for data migration as detailed in **Figure 3** and work closely with client's third party suppliers to establish dedicated interfaces as depicted in **Figure 4**.

THE DATA MIGRATION PROCESS:

Analysis – Data to be analysed for integrity and usability. Potential issues are to be highlighted here. Volume of data is also to be covered in this section.

Plan – The planning phase of the migration. Solutions to issues found in the analysis stage are to be listed here

Migrate – The actual process of migration itself. This section will dictate the method of migration, the timescales of migration and any requirements that the migration will have (software or otherwise)

Validation – Ensuring that the migration has gone as planned, with all required data having been migrated

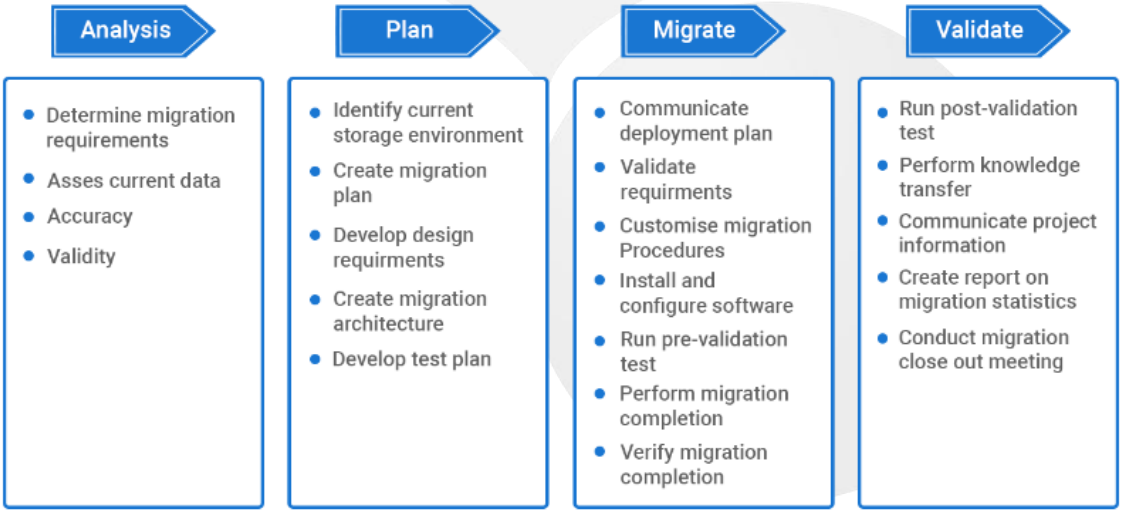


Figure 3 - Data Migration Process

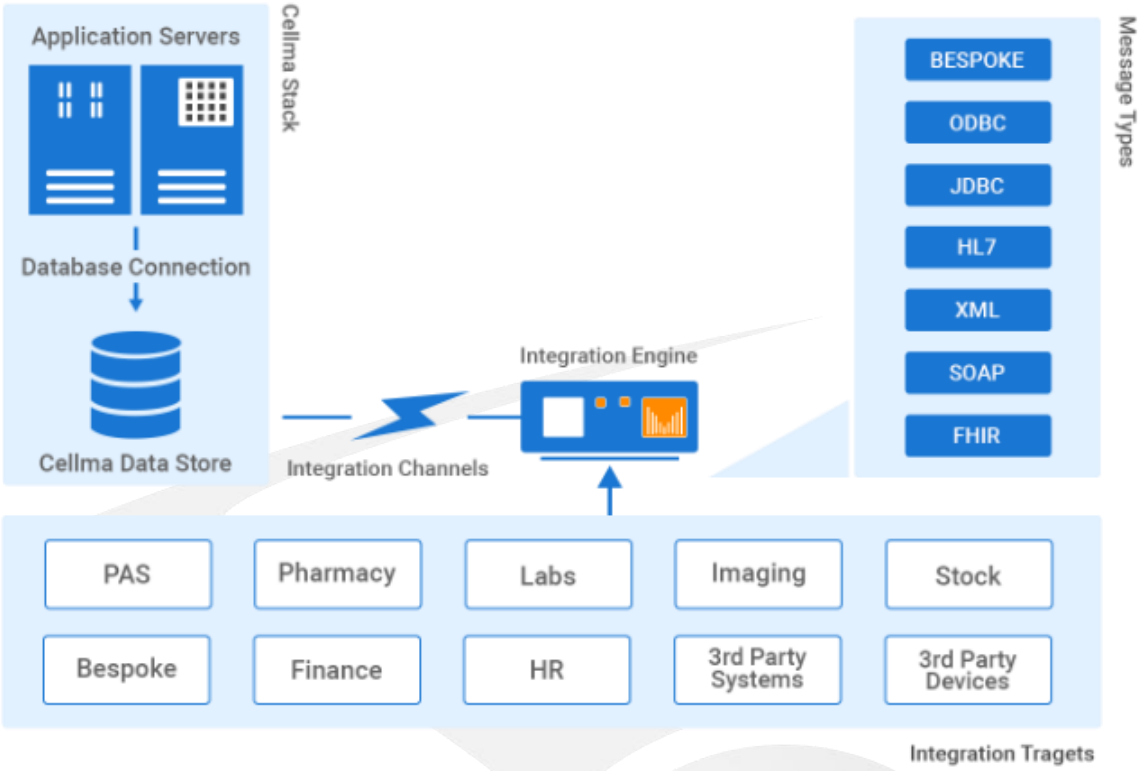


Figure 4 - Integration Diagram

Please refer to the above high-level explanation in subsequent steps where data migration and integration are highlighted.

STEP 3: Approval

The Project Manager will forward the assessment tools, letters, summaries and reports for approval. Additionally, data migration and integration will be included in the approval process. The site will need to complete these approval forms and indicate any alterations or changes clearly in the issue logs provided.

STEP 4: Paper Testing

Any site requested changes or alterations will be reviewed and discussed with the site. Revised paperwork will be resubmitted to the site for approval. Upon site approval, User Acceptance Testing (UAT) of the revised 'paper' assessments will be completed by the site. Testing should be conducted on a minimum base of 20 patients over a two-week period. Data migration and integration will also be included in the testing phase.

STEP 5: Cellma Customisation

The site's approved assessments, tools, letters, summaries and reports will now be embedded into Cellma; this process will take 50 days.

STEP 6: Prototype

A demonstration of Cellma will be provided for the whole team, any final changes will be identified before the training session. Data migration and integration will be included in the working prototype.

STEP 7: Final Customisation/Alteration

This is a fine-tuning exercise and any alterations suggested will be discussed, agreed and implemented as required, in preparation for the training session. UAT will take place at this stage.

STEP 8: Site-Specific Cellma Training

Onsite training will be conducted using the customised Cellma application. All users will be provided with training relevant to their skill set. Training will be conducted in groups of 6-8 people per trainer, ideally in an IT training suite.

STEP 9: Go Live & Floor Walking

A Go Live date is agreed during the implementation phase and this occurs after staff training. Any issues raised during the training that are quick fixes will be addressed by staff on-site. Staff will commence using the software at the next clinic session on or after Go Live date. A RioMed Project Manager will remain on site to work closely with the site users to ensure that they can use Cellma appropriately with the input of real patient data.

STEP 10: Hand-holding

Typically, a 3-month period of hand holding takes place during which the Project Manager works closely with the site to adequately prepare the local support team.

Follow-Up

Site teams will be contacted weekly by the RioMed support team, during the hand holding period, to respond to any queries or to resolve any outstanding issues that the site may experience in the initial stages of using Cellma.

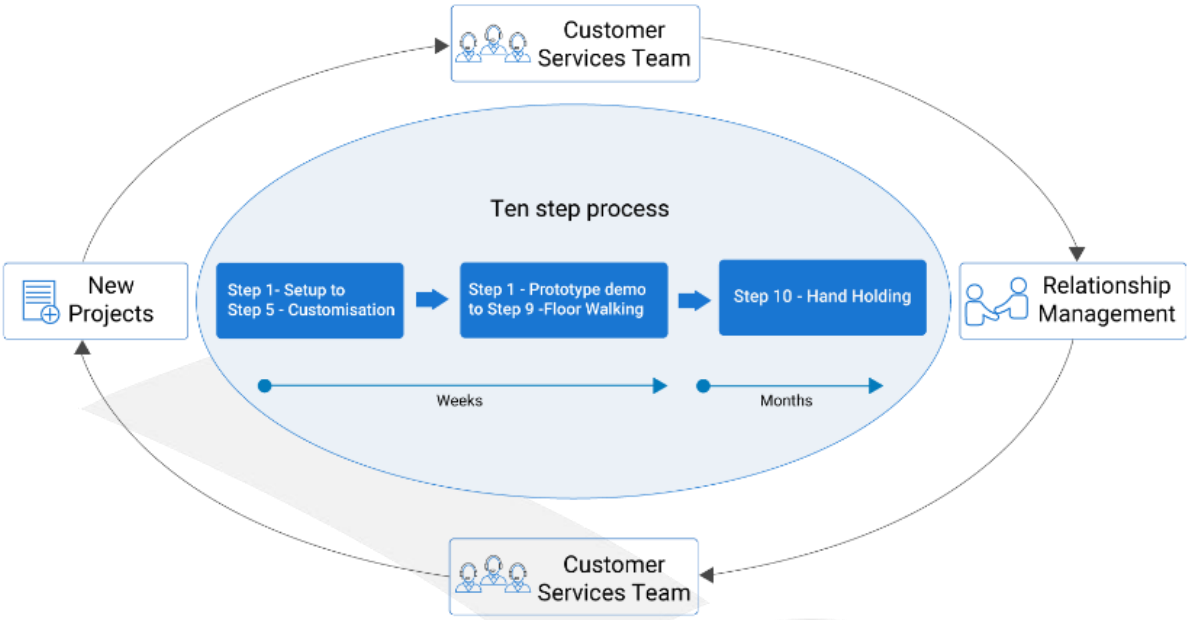


Figure 5: Cellma Helpdesk Process

RioMed provides a competent helpdesk response service, typically covering second level support, which, during the hours for support and maintenance services will enable:

- Logging, monitoring and reporting of all calls
- Call classification / prioritisation
- Call escalation
- Call resolution notification
- Call close-off
- Call status query
- Call activity analysis reporting

OPERATIONS SUPPORT

RioMed provides comprehensive support through our customer service and project teams, who are highly trained and have extensive experience in implementing and maintaining clinical software.

As part of our installation process, embedded within the 10 Step Installation Process, our Project team work closely with locally identified administrators. These administrators will be trained on-site and

operate as on-site experts for Cellma. Users will be able to approach these administrators for on-site support and user training. Ongoing support is provided to local Cellma admin staff by RioMed throughout the duration of the contract to ensure Cellma administration staff are kept abreast of any functionality changes.

SERVICE CONSTRAINTS

CUSTOMER RESPONSIBILITIES

Although the process of site implementation will be defined and managed by RioMed, the Client will be responsible for the following:

- Providing Computer literacy training 1st time computer users
- Providing Computers for staff at the point of contact
- Provision of all server side hardware for locally hosted installations
- Provision of all client side hardware
- Provision of network infrastructure with 99.5% availability
- Maintaining the Wide Area Network (WAN) connection between sites
- Maintaining the Local Area Network (LAN) within each site
- Physical security of the server stack for locally hosted installation

SERVICE LEVELS

PERFORMANCE

Cellma has planned uptime of over 99.5% using on average 12.6kbs bandwidth for each transaction. The average log-on rate for sites where Cellma is deployed never drops below 95%, showing its outstanding acceptance rate.

RioMed will produce an Incident Report for all potential Showstoppers which will outline the cause, detail any unplanned downtime, identify area(s) at fault and identify corrective action to mitigate any future risk of reoccurrence.

Where the fault lies with the site network, hardware or users, RioMed will recommend corrective and preventative actions for the site.

CELLMA SERVICE DESK/HELPDESK

RioMed's Cellma Helpdesk is available via email or phone for the logging of customer incidents and service requests during the hours of service. The client's Cellma Administrator is typically responsible for 1st Level Support and RioMed's Cellma Helpdesk will be responsible for 2nd Level Technical Support with respect to Cellma related issues.

SUPPORT HOURS

RioMed's Cellma Helpdesk is available 24/7/365.

Problem and Fault Categories and Resolution Times

Level	Category	Category Description	Response Time	Resolution Time
P1	Critical	Any software problem or data corruption caused by a software malfunction resulting in the software being unreliable, not working correctly or unavailable for use by all users	15 Mins	2 Hours
P2	Major	Any software problem or data corruption caused by a software malfunction resulting in the software being unreliable, not working correctly or unavailable for use impacting more than one user	30 Mins	1 Business Day*
P3	Serious	Any software problem or data corruption caused by a software malfunction resulting in the software being unavailable for use or not working correctly impacting an individual user only	1 Hour	2 Business Days*
P4	Minor	Any software problem or data corruption caused by a software malfunction resulting in the software not working correctly but a work-around is available and the business impact is minimal	24 Hours	10 business days* for simple work-around or Next release for code change
P5	Other	A cosmetic or other materially insignificant fault is present in the software but there is no business impact *(this does not represent enhancements or functionality changes to the software, ref. change management process)*	24 Hours	Next Realease

** where 1 business day represents a 24-hour period.*

Figure 6: Problem and Fault Categories and Resolution Times

All users are provided with training materials at the point at which they are being trained. All users who meet the required competency levels are provided with a certificate post training. Training videos and reference materials can be accessed by users at any time from within Cellma.

Cellma's integrated online training portal provides Cellma users with a comprehensive resource of Cellma tutorials on all Cellma modules and workflows, tailored to the service. The portal is simple to use and intuitive, providing videos, tutorials and assessments. The platform calculates a user's competency automatically and highlights any 'problem' areas to the service, the local Cellma admin support staff and our support team at RioMed to ensure a focused training approach can be adopted. The online training portal also provides electronic copies of user manuals, as required, and has been designed for all user types. It is recommended the portal is utilised ahead of gaining Cellma user access to ensure a minimum level of competency before access to the live site is granted.

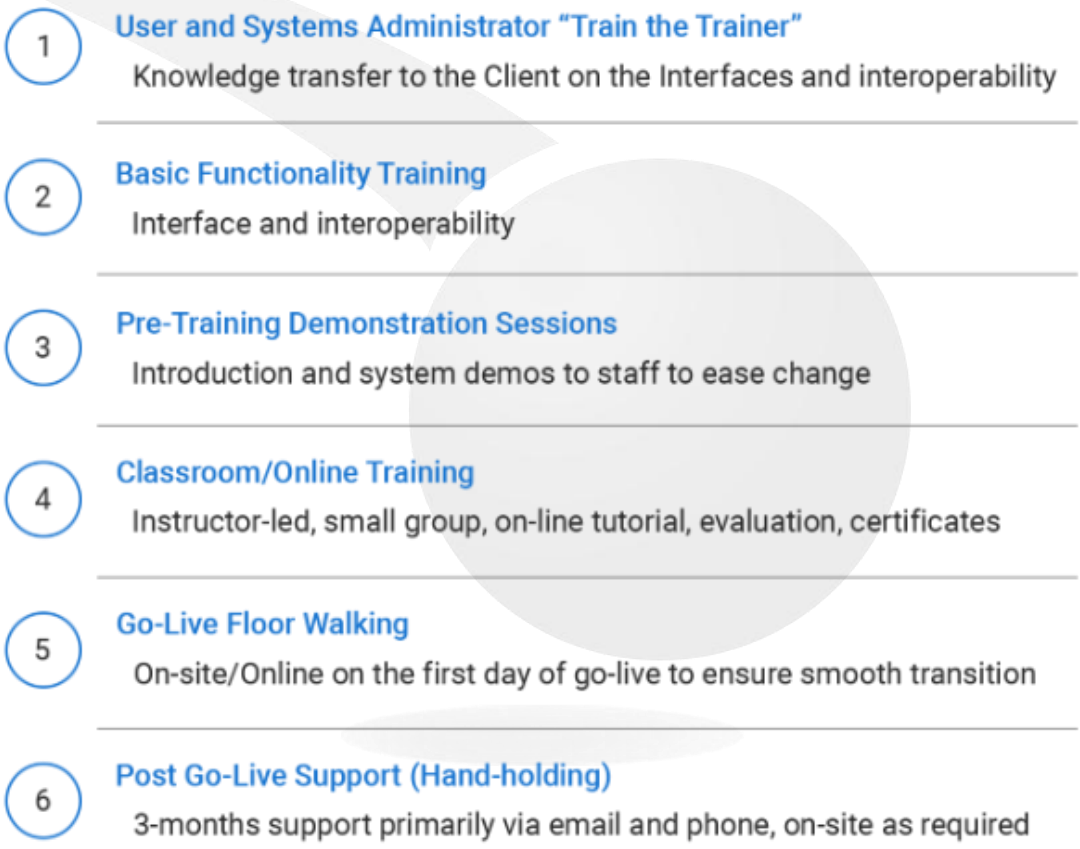


Figure 7: Six Step Training Process

In essence we start by training those who would be Cellma administrators of the system termed "Train the Trainer". This will take place as a classroom training session organised by the RioMed Project Manager responsible for your implementation. This would allow those personnel to undertake user acceptance testing (UAT) once the system had been configured.

These trainers would then work in conjunction with RioMed to train the rest of the users on the system as a classroom-based session. Upon completion, certificates are issued. Prior to this a demonstration of the system would be given to the staff to sensitise before they undergo training.

Our blended learning approach means that the classroom sessions are supplemented by online learning and manuals.

Cellma's integrated online training portal provides Cellma users with a comprehensive resource of Cellma tutorials on all Cellma modules and workflows, tailored to the service. The portal is simple to use and intuitive providing videos, tutorials and assessments. The platform calculates a user's competency automatically and highlights any 'problem' areas to the service, the client support staff and our support team ensure a focused training approach can be adopted. The online training portal also provides electronic copies of user manuals as required and has been designed for all user types. It is recommended the portal is utilised ahead of gaining Cellma user access to ensure a minimum level of competency before access is granted.

Help can be accessed from with Cellma at any time the user requires. This takes the form of User Guides, Helpful hints and online videos.

At the Go Live stage of the implementation your RioMed Project Manager will 'floor walk' to ensure a smooth transition.

RioMed trainers together with the local administrators are responsible for the on-going training of users at each site. Together they will ensure that users are kept up to date on the functionalities associated with each new release of the software.

RioMed releases system upgrades 4 times per year and clients may take advantage of as many of these as they require to take advantage of additional functionality. These upgrades are included in the annual maintenance and support cost and will not incur an additional charge.

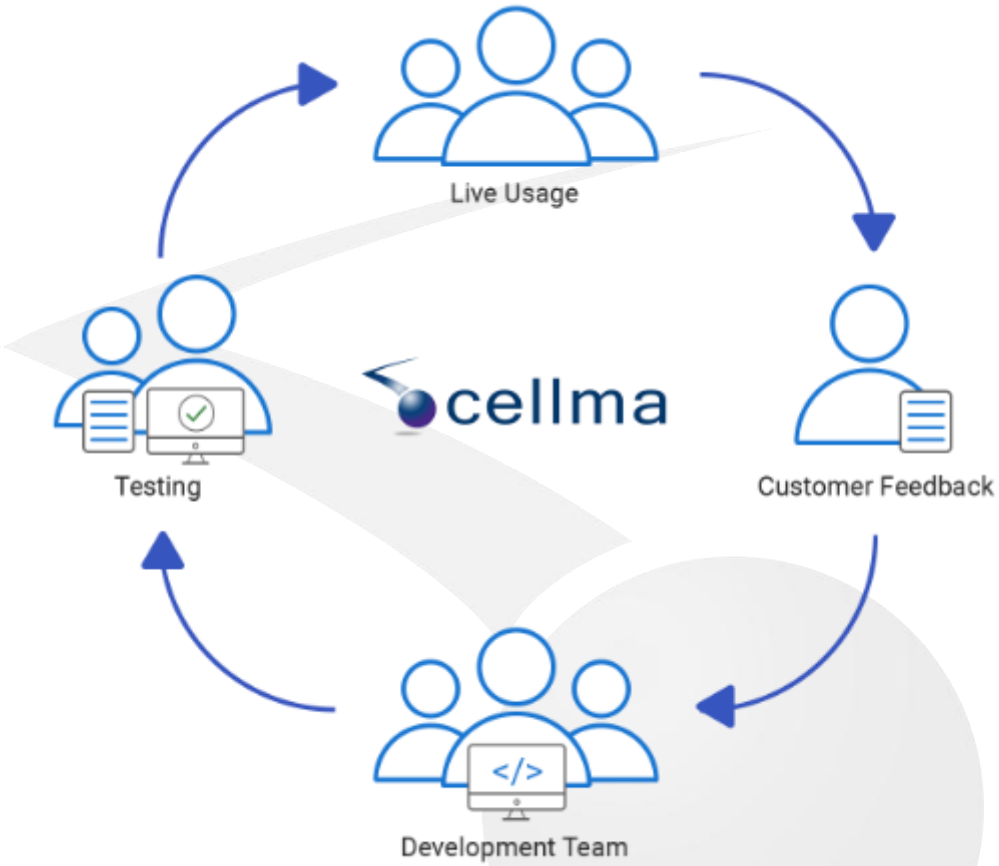


Figure 8: CELLMA Development Cycle

Enhancements or new requests based on statutory or legislative requirements are fed to the development team, as shown in the diagram above. Turnaround is usually 3 months, from request to deployment.

Users can make requests at any time for development that would enhance Cellma. These developments do not carry any additional charge. Any additional work required by the users that are specific to the site and have no added value to other customers, may incur a cost. All charges are based on the prevailing daily rate.

Cellma releases occur every quarter. These releases incorporate the addition of new functionality and bug fixes. There are minor internal releases which occur throughout each quarter, but these are not released to the end user and act as an internal reference only. This system allows for a flexible and agile application that keeps up to speed with the needs of the users. Suggestions for software

alterations, that are deemed to add value to the system as a whole, are incorporated with no additional charge.

To avoid bugs being released to the end users, RioMed undertake extensive internal testing using the latest Microsoft Technologies. Select sites then receive the release for 'live' testing before the release is made public for all users.

DATA CONFIDENTIAL ASSURANCE

Cellma has been developed in line with JCI, ISO 9001, 14001 and 27001 standards. RioMed is registered under the data protection act to hold relevant patient information and are Cyber Essentials certified. RioMed's policies and procedures and our accreditation by HSCN. We are now registered with its successor the Data Security and Protection (DSP) Toolkit.

Cellma tracks all users of the system from the moment they are logged until they are logged out. Full audits can be generated for all activities performed by users.

All communication between client machines/devices and Cellma servers can be protected using SSL encryption for data transmission where required by the site.

BACK-UP/RESTORATION AND DISASTER RECOVERY

Our disaster recovery procedures and protocols have been approved by HSCIC and follow Data Security Protection Toolkit processes and procedures.

Cellma has a planned uptime of over 99.5% using on average 12.6kbs bandwidth for each transaction. The average log-on rate for sites where Cellma is deployed never drops below 95%, showing its outstanding acceptance rate.

Back-ups are normally, 200MBS to 3GBS. Back-ups are set to occur twice daily at times preferred by the system administrator. Emails can be sent to the administrator at RioMed and IT administrator confirming that back-ups have been carried out. The entire database and associated letters directory are backed up as part of the normal back up.

Backups will be provided to the site on pre-agreed timelines, for storing off site in line with clinical governance requirements.

DATA RESORATION/SERVICE MIGRATION

RioMed software is deposited in an ESCROW with NCC Group Escrow. If the customer prefers a different company to hold the ESCROW this can be arranged. An annual charge is levied by NCC for this service, which will be passed onto client.

Our recovery from cold back-up normally takes ½ hr. Restoration of services would be from back-up, held on the SAN. If server failure or disc failure is the cause of service disruption, a full restoration to new instance of the application to a different server, can occur within 2 hours.

If there is a disruption to services, all users of the software will be informed within 1 hour. Our comprehensive business continuity policy contains full details of the disaster recovery plan. The policies together with all other documents are available on request.

TECHNICAL REQUIREMENTS

ACCESS

Cellma is a truly web based application, the only requirements at the user interface is a web browser and connectivity to the HSCN/N3 environment.

Aladdin tokens can be provided to users who require remote or roaming access. (2 factor authentication).

User access is determined by their legitimate relationship, their user group, and their role within that user group. Access is gained through username and passwords. Usernames and passwords are provided by system administrators at application training. All users are given training on clinical and information governance issues during training. Information governance and security guidelines should be included in staff contracts.

Patients can access Cellma through Cellma's Patient app and Patient Portal to capture feedback, patient reported outcome and experience measures (PROMs and PREMS). Patient passwords are provided at the time of their registration.

ENCRYPTION

All communication between client machines/devices and Cellma servers are certified by VeriSign using 256bit encryption for data transmission.

QUALITY

Cellma has been developed in line with ISO 9001 and 27001 standards. RioMed is registered to under the data protection act to hold patient relevant patient information. RioMed's policies and procedures and our accreditation by the NHS Information governance statement of Compliance (IGSoC) team at connecting for health relating to governance are available on request. Cellma tracks all users of the system from the moment they are logged until they are logged out.

Full audits can be generated for all activities performed by users between any give timescales.

HOSTING

Cellma can be hosted on RioMed Secure Health Application Block, on Local servers within a hospital network or within a Tier 3 datacentre though our partner programme. RioMed's preferred method of hosting is within a Microsoft Azure Tier 3 Data Centre. The system uses mirrored servers and the 2 data centres are in 2 geographically different locations, both in the UK. This allows for optimal availability, reliability and security.

All our deployments comply with NHS IGSoC requirements for connecting for health.

All servers that are equipped with raid drives are deployed using hot or cold back-ups depending on the local requirements.

Back-ups are set at times defined by users and can vary from real-time to hourly, 12 hourly or every 24 hours. Back-ups are routinely monitored and weekly checks carried out to test restoration from back-up are error free. Our disaster recovery procedures and protocol have been approved by connecting for health through the IGSoC processes and procedures.

The Cellma application is guaranteed to run at 99.5% availability, with average transaction size of 12.5 kbs.

FOR A LOCAL INSTALLATION

RioMed requires an established VPN connection within the site network. The connection would be used to install, configure, support and update the Cellma application.

All data is sourced, exchanged, viewed and stored within the site environment. Data will not be extracted from these servers by RioMed.

Data may or may not be sourced and exchanged with the other information systems using FHIR HL7, HL7, XML, JDBC, ODBC, Soap or bespoke messaging.

CLIENT CONFIGURATIONS

USERS

All users will be able to access the system from any clinic location within the network. Provided they have appropriate user privileges to log into the application

CLIENT SPECIFICATION

Client Requirements

CPU Speed: 1.2 GHz
RAM: 1 GB
Disk Drive: 10 GB
Operating System: Windows XP or later
Software used to run CELLMA:

- Internet Explorer 10 or above
- Chrome (latest version)
- Microsoft Word
- Microsoft Excel
- Adobe Flash Player
- PDF Reader

NETWORK CONNECTIVITY

Cellma is completely web-based application that uses TCP/IP protocol for connections across the network.

SERVER CONFIGURATIONS

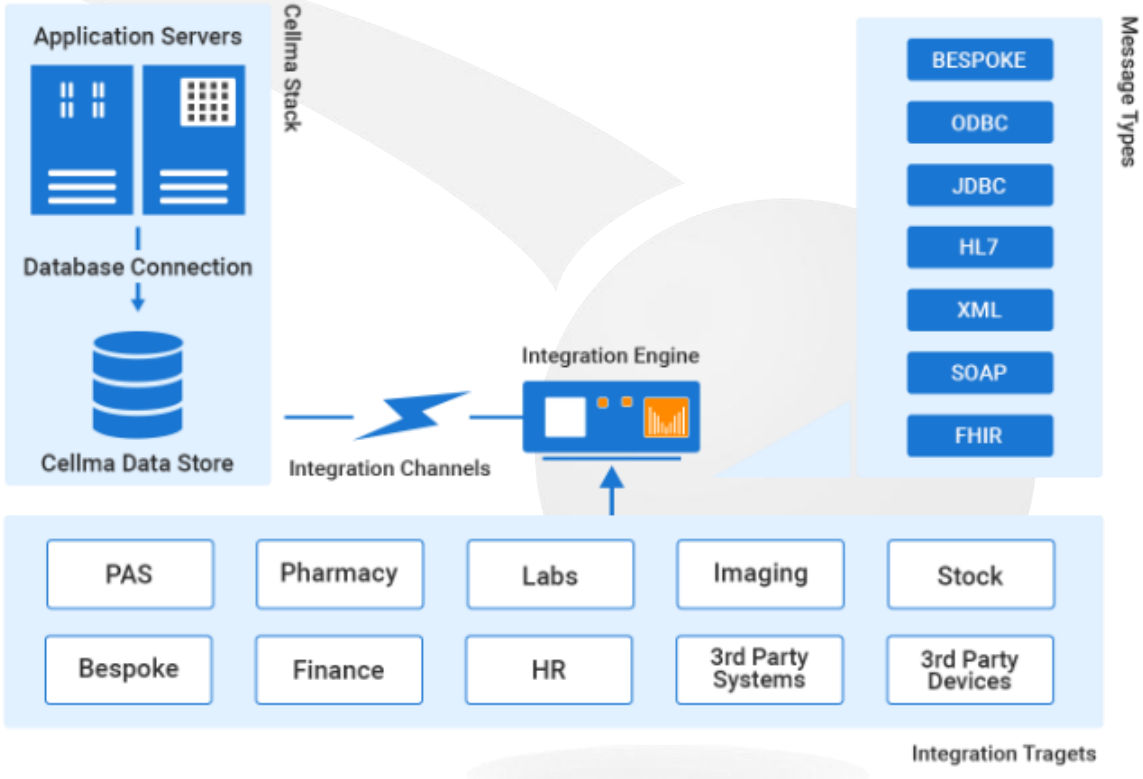
Full details of the latest minimum hardware and configuration requirements is available upon request from RioMed/is outlined in the attached document, with more details attached below.

INTEGRATION

Cellma is deployed with an integration engine which manages all communications with third party systems. It facilitates bi-directional connectivity to laboratories and local and national repositories using FHIR HL7, HL7, SOAP, ODBC, JDBC, XML and bespoke messaging. See Figure 21 Cellma provides communications to the client's data warehousing facilities

Data may or may not be sourced and exchanged with the client's hospital information systems and GP systems using FHIR HL7, HL7, XML, JDBC, ODBC, SOAP or bespoke messaging. RioMed provides data migration facilities for new installs to ensure continuity with legacy systems. This capability can be provided by a skilled team of migration experts specific to the local requirements.

All interfaces are carried out using our mirth integration engine in the manner shown in the diagram below. All interfaces are managed though our 10-step implementation methodology used for all project activities



TERMINATION TERMS

RioMed will provide assistance where possible to facilitate a transition to any replacement service.

RioMed will not be obliged to disclose any confidential information to the customer or replacement supplier, or to transfer any assets, contracts, employees or third-party licences.

RioMed will provide an inventory of all data relating to the services that is under the control of the RioMed.

RioMed will transfer all the customer data relating to the services to the customer. Data Migration services appear under 'additional chargeable services'.

At the end of the contract with the customer and if the customer does not wish to renew their service.

RioMed will assist the Customer in facilitating the orderly transition of the services from RioMed to the Customer or any replacement supplier upon the expiry or earlier termination of the agreement. This section sets out the principles regarding the service transition that form the base of an Exit Plan.

RioMed shall produce an Exit Plan upon notification of termination of the agreement, as soon as practicable (but not later than 60 days) after any notice of termination of the agreement.

EXIT PLAN

The Exit Plan shall, unless otherwise agreed with the Customer:

• Address each of the issues set out in this Exit Plan in order to assist the Customer in facilitating the transition of the RioMed Services from RioMed to a replacement supplier or the Customer ensuring to the extent reasonably possible that there is no disruption in the supply of Services and that there is no deterioration in the quality of delivery of the Services during any period of transitional assistance;

• Provide an estimate of the scope of transitional assistance that may be required by the Customer and suggest how such assistance might be provided (if required); and

• Provide an estimate of RioMed's personnel that may be required to provide transitional assistance and suggest the management structure to be put in place and employed to provide such transitional assistance.

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Sexual Health

Occupational Health

Diabetes

Oncology

Ophthalmology

Audiology

Dental

Rheumatology

Paediatrics

Maternity

cellma

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Better Help, Better Health!

Follow us on:

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