Folio Clinical Document Management - Service Definition Document

1. Executive Summary

Folio is a secure cloud hosted clinical document management platform designed specifically for NHS primary care organisations that transforms paper-based correspondence workflows into streamlined digital processes. The system uses AI-powered document detection to automatically match incoming correspondence to patient records, reducing manual data entry by and minimising filing errors. The system supports native integration with Microtech's 'Bridge' Electronic Document Transfer module, and third-party EDT modules (e.g. Docman Connect, Docman EDT) enabling secure electronic document transfer between primary and secondary care settings, replacing traditional communications with timely electronic delivery.

The platform's AI Detect technology automatically identifies patients from document text, extracts key information including document type, date, and clinical coding suggestions, significantly reducing administrative burden on practice staff. Multi-stage workflows route documents to appropriate clinical and administrative staff based on configurable rules, ensuring correspondence reaches the right person at the right time. Recently viewed patients lists, appointment integration, and advanced search capabilities accelerate document access during consultations.

Integration with UK primary care systems enables documents filed in Folio to be automatically coded and referenced in patient records, eliminating duplicate data entry. The Insights dashboard helps administrators monitor document volumes and workflow performance, supporting workload planning and resource allocation. With comprehensive audit trails and document manipulation tools including rotate, crop, highlight, and stamp, Folio supports both operational efficiency and regulatory compliance requirements.

2. Service Overview

2.1 Service Description

Folio provides core functional areas for managing clinical documents throughout their lifecycle. The Capture module enables staff to scan incoming post directly into the system or import existing digital documents via drag-and-drop, with configurable scanner profiles for different document types and quality requirements. AI Detect then automatically matches documents to patient records, suggests document types and clinical codes, and populates filing information, though staff retain full manual override when needed.

The Workflow module enables multi-stage routing where documents can be sent to individual staff members or groups, with options for "any recipient" completion (first person completes) or "all recipients" completion (everyone must review). Staff can set priority levels, add due dates, and include notes or predefined comments. The Patient Documents section provides rapid access to patient records through search, recently viewed lists, or appointment integration, with documents organised in folders and sortable by date, type, or organisation.

Library Documents provides secure storage for practice materials including policies, procedures, and templates in configurable areas like Confidential, Surgery, and Practice sections. Integration with Electronic Document Transfer module facilitates electronic document transfer between care settings, automatically routing correspondence to other organisations with delivery confirmation. The Document Search function enables staff to find documents using multiple criteria including patient name, document content, type, organisation, or date range, while the Insights dashboard displays filing volumes and workflow creation statistics to support practice management decisions.

2.2 Target Users

- Single and Multi-site GP Practices
- Primary Care Neighbourhood Networks
- Back-off Administration Organisations

Seeking to replace existing Document Management Systems or reduce administrative burden; eliminate paper-based processes; standardise document management across member practices; enable shared workflows and enhanced care coordination.

3. Technical Architecture

3.1 Infrastructure

The platform operates on Microsoft Azure cloud infrastructure within UK regions, ensuring data sovereignty and compliance with NHS data residency requirements. The architecture employs Azure's Platform-as-a-Service (PaaS) offerings including App Service, Azure SQL Database, Azure Storage, and Azure API Management. Multi-zone deployment across availability zones provides resilience against datacentre-level failures. All components leverage Azure's native security features including DDoS protection, Web Application Firewall, and Azure Security Centre monitoring.

3.2 Application Architecture

Microservices architecture separates concerns into independently deployable components: data ingestion service (receives readings from monitors), clinical rules engine (evaluates thresholds and generates alerts), notification service (sends alerts via email/SMS), reporting service (generates analytics), and API gateway (manages external integrations). This design enables independent scaling, isolated fault domains, and technology stack flexibility. Service-to-service communication utilizes Azure Service Bus for asynchronous messaging and Azure API Management for synchronous REST calls.

3.3 Data Storage

Patient data resides in Azure SQL Database with Transparent Data Encryption (TDE) enabled. Database configured for geo-redundant backup with 30-day point-in-time restore capability. Hot data (recent 90 days) stored in primary database tables, older data archived to Azure Blob Storage with lifecycle policies. Binary content (uploaded documents, exported reports) stored in Azure Blob Storage with encryption at rest. All storage accounts configured for geo-redundant storage (GRS) with replication to secondary UK region.

3.4 Integration Architecture

HL7 FHIR R4 API provides standardised integration interface for clinical systems. Pre-built connectors available for EMIS Web, TPP SystmOne, and Vision GP systems utilising vendor-specific APIs where FHIR not yet available. Integration patterns support: filing of documentation into GP System clinical records; patient demographic synchronisation (ensuring consistent patient identification).

4. Security and Compliance

4.1 Information Security Management

ISO 27001:2022 certified Information Security Management System (ISMS) governs all security practices. Annual surveillance audits by accredited certification body verify ongoing compliance. Information security policies cover: access control, asset management, cryptography, physical security, operations security, communications security, system acquisition and development, supplier relationships, incident management, business continuity, and compliance. Policy framework reviewed annually and updated following significant incidents or regulatory changes. All staff undergo security awareness training during induction and annually thereafter.

4.2 Data Protection and Privacy

GDPR compliance maintained through comprehensive data protection framework including: lawful basis documentation (Article 6 and 9 processing), Data Protection Impact Assessments (DPIA) for high-risk processing, Records of Processing Activities (ROPA), data subject rights procedures (access, rectification, erasure, portability), breach notification processes, and data retention policies. Data Processing Agreements provided to all customers documenting processor responsibilities. Dedicated Data Protection Officer oversees compliance program and serves as point of contact for supervisory authorities and data subjects.

4.3 Clinical Safety

DCB0129 and DCB0160 clinical risk management standards compliance ensures patient safety. Qualified Clinical Safety Officer (registered healthcare professional with clinical safety training) appointed to oversee safety management system. Clinical Safety Case documentation includes: hazard identification and analysis, risk evaluation and mitigation, safety requirements specification, and residual risk assessment. Hazard log maintained documenting identified hazards, severity ratings, probability assessments, risk scores, mitigations, and residual risks. Safety incidents reported through dedicated pathway with investigation and learning process. Annual clinical safety review conducted with independent clinical safety assurance.

4.4 Penetration Testing

Annual penetration testing by CREST-approved cybersecurity firms identifies vulnerabilities before malicious actors can exploit them. Testing scope includes: external infrastructure testing, web application testing (OWASP Top 10), API security testing, and social engineering assessment. Tests conducted using industry-standard methodologies (OWASP Testing Guide, PTES). Findings classified by severity with remediation timelines: Critical (7 days), High (30 days), Medium (90 days). Remediation verification testing confirms effective fixes. Test reports provided to customers under NDA upon request during procurement evaluation.

4.5 NHS Data Security and Protection Toolkit

Annual Data Security and Protection Toolkit (DSPT) submission achieves 'Standards Met' status. Toolkit covers ten data security standards including: personal confidential data, staff responsibilities, training, managing data access, process reviews, responding to incidents, continuity planning, unsupported systems, IT protection, and accountable suppliers. Evidence library maintained demonstrating compliance with each mandatory assertion. Senior Information Risk Owner (SIRO) at board level provides executive oversight of information risk management.

5. Service Management

5.1 Service Level Agreement

99.9% uptime SLA calculated monthly permits maximum 43 minutes unplanned downtime per month. Availability measured using Microsoft Azure's monitoring infrastructure supplemented by independent third-party monitoring. Planned maintenance excluded from availability calculations when: 7 days advance notice provided, scheduled during low-usage periods (typically Sunday 2-6am), duration does not exceed 4 hours per occurrence.

5.2 Incident Management

Standard Support (included in base price): email and phone support during business hours (8am-6pm Mon-Fri), response within 2 business hours for critical issues. Access to online knowledge base, video tutorials, and documentation P1 - Response time 2 hours; fix time 5 hours P2 - Response time 3 hours; fix time 7 hours P3 - Response time 5 hours; fix time 1.5 days P4 (RFI) - 10 days to completion

5.3 Change Management

Structured change management process balances innovation with stability. Change categories: Standard changes (pre-approved, low risk, automated deployment), Normal changes (requires Change Advisory Board approval, scheduled deployment window), Emergency changes (expedited approval for critical security patches or major incident resolution). All normal changes require: business justification, technical design, security impact assessment, rollback plan, test evidence, and CAB approval. Release schedule: minor updates deployed weekly during maintenance window, major

releases quarterly with extended testing period, security patches deployed within 24-48 hours based on severity. Customers receive advance notification of changes via email and in-portal announcements.

5.4 Continuous Improvement

ISO 9001:2015 quality management system drives continuous service improvement. Customer feedback collected through: quarterly satisfaction surveys, user group meetings, support ticket analysis, and feature request portal. Product roadmap published quarterly showing planned enhancements and priorities. Service improvement register tracks identified opportunities with priority ranking and implementation status. Key performance indicators monitored monthly: user satisfaction scores, support ticket resolution times, system availability, feature adoption rates, and security metrics. Annual management review assesses quality management system effectiveness and identifies improvement opportunities.

6. Implementation Methodology

6.1 Implementation Approach

Comprehensive onboarding program ensures successful implementation. Process begins with kickoff meeting to understand requirements, practice workflows, and technical environment. Implementation timeline includes technical setup including Azure tenant provisioning; NHS N3/HSCN connectivity testing; API integration with GP systems; user account creation, and role-based access configuration; patient cohort setup; data migration (if applicable), and system testing; user training via combination of webinars and self-paced e-learning modules. Training covers: clinician use; administrative functions; troubleshooting. Provide comprehensive documentation: user guides, quick reference cards, video tutorials, FAQ database. Assign dedicated implementation manager throughout onboarding. Post-go-live support includes 30-day enhanced support period with daily check-ins, troubleshooting assistance, and workflow optimisation. Implementation checklist ensures all steps completed before go-live.

6.2 Implementation for Larger Organisations

Multi-site implementations (Health Boards, Primary Care Networks, Community Trusts, ICS-wide deployments) follow adapted methodology with extended timelines. Additional activities include: stakeholder mapping and engagement across sites, technical architecture design for complex integration requirements, change management planning and communications, training-the-trainer program for local champions, phased site rollout with lessons learned incorporated, and governance structure establishment for ongoing service oversight.

7. Support Services

7.1 Standard Support (Included)

Standard Support (included in base price): email and phone support during business hours (8am-6pm Mon-Fri), response within 2 business hours for critical issues. Access to online knowledge base, video tutorials, and documentation P1 - Response time 2 hours; fix time 5 hours P2 - Response time 3 hours; fix time 7 hours P3 - Response time 5 hours; fix time 1.5 days P4 (RFI) - 10 days to completion

7.2 Knowledge Base and Self-Service

Comprehensive knowledge base containing: user guides for all roles (administrator, clinician), quick start guides and video tutorials, frequently asked questions, troubleshooting guides, integration documentation, API reference documentation, and release notes. Content searchable and categorized by role and topic. Monthly webinars covering new features and best practices. Quarterly user group meetings for larger customers.

7.3 Training Services

Standard implementation includes training for up to 10 users (remote sessions). Training modules: system administration, clinical user training. Train-the-trainer program for organisations wanting internal capability. E-learning modules available for self-paced learning and ongoing onboarding.

8. Terms and Conditions

8.1 Contract Terms

Minimum contract period: 12 months from go-live date. Contracts renew automatically for successive 12-month periods unless 90 days written notice provided by either party. No early termination fees after initial 12-month period completed. During initial 12 months, early termination permitted with 90 days notice plus payment of remaining contractual obligations. Price changes limited to annual increases capped at RPI.

8.2 Liabilities and Indemnities

Professional indemnity insurance: limit £2 million per claim. Public liability insurance: limit £10 million per claim. Product liability insurance: limit £10 million per claim. Insurance certificates provided upon request. Liability cap: total liability limited to 12 months' subscription fees except for: data breaches caused by our negligence, intellectual property infringement, fraud, or gross negligence (no cap). Force majeure provisions cover unforeseeable circumstances beyond reasonable control. Mutual indemnification for breach of respective obligations.

8.3 Data Ownership and Processing

Customer retains ownership of all patient data. We operate as data processor under GDPR Article 28, with customer as data controller. Data Processing Agreement documents: scope and purpose of processing, types of personal data, categories of data subjects, processor obligations, sub-processor arrangements, data security measures, breach notification procedures, data subject rights support, data deletion/return provisions, and audit rights. Customer determines lawful basis for processing. We process data solely according to customer instructions and contractual obligations.

8.4 Service Dependencies

Service requires: active NHS N3/HSCN connection or equivalent secure network, compatible GP clinical system (EMIS, TPP, Vision), customer IT support for local connectivity issues, customer clinical governance oversight. Customer responsibilities: clinical decision-making based on local workflow data, patient safety oversight, user account management. We provide technology platform but do not provide clinical services or replace clinical judgment.

9. Contact Information

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