

# Bleepa<sup>®</sup>: technical architecture and integration overview

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Feedback Medical is the strategic partner to unlock productivity in health and care through digital connectivity and asynchronous collaboration. With proven expertise in system integration, we enable teams to work flexibly, share information securely, and deliver care more efficiently.

Bleepa is an award-winning collaboration platform that improves the quality and productivity of patient pathways enabling health and care organisations to hit targets with their existing clinical workforce. We achieve this by connecting digital infrastructure across systems, enabling asynchronous working, reducing geographic barriers and removing unnecessary appointments.

Bleepa is an easy-to-use platform for all patient referrals, diagnostic requests, clinical communication and patient pathways. It is a secure, fully compliant UKCA-marked medical device certified for review of medical grade images and capture of clinical photographs.

It integrates with both NHS England national systems such as the e-Referral Service (e-RS) and GP Connect, and local hospital systems such as patient administration systems, PACS and electronic patient records.



## Implementation and deployment

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Implementation is fast and minimally disruptive, with deployments often completed in weeks depending on the complexity of system integration and configuration to customer needs.

Longer timeframes may be needed for multiple pathway, multi-site deployments but we will fully assess customer needs before a project commences. Each implementation has a dedicated project manager ensuring an effective deployment and the co-development of a project plan with agreed milestones and delivery targets.

Detailed clinical, functional, and technical requirements are documented as part of the plan. An assessment of risk is required and carried out for all projects, and mitigation strategies that need to be implemented to reduce the risk are mapped with the customer.

## Quality, information security and clinical safety

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Quality, information security, and clinical safety are all critically important to our customers to ensure compliance with NHS and other standards and safe sharing of sensitive patient information.

We align our working practices with compliance needs through a number of initiatives, including:

- Active maintenance of [ISO 13485 certification](#) – the Quality Management standard for Medical Device manufacture (certified since 2014).
- Active maintenance of [ISO 27001 certification](#) – the Information Security Management standard (certified since 2020).

- Fully documented and tested business continuity management processes and procedures audited as part of our ISO 27001 certification and in alignment with the requirements in ISO 22301 BCM systems.
- Certification against the UK government [Cyber Essentials](#) and [Cyber Essentials Plus](#) standards.
- Producing products that comply with the DCB0129 Clinical Safety Standard.
- Aligned with the [NHS Digital Technology Assessment Criteria \(DTAC\)](#).

Bleepa is manufactured, deployed and supported by Feedback Medical under our validated quality and security processes, and the product holds a UKCA certification as a medical device for clinical communications and medical image display.

These certifications collectively demonstrate Bleepa's maturity, safety, security and suitability for clinical deployment.

## Security infrastructure & governance

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Bleepa is built using a defence-in-depth security architecture aligned with ISO 27001, Cyber Essentials Plus and NHS Data Security and Protection Toolkit requirements. Security controls include:

- Layered network security controls, including firewalls, network segmentation, controlled traffic flows, and continuous threat monitoring. Multi-layer network protection using firewalls, load balancers and threat monitoring.
- Continuous vulnerability scanning and threat detection.
- Regular CREST-certified penetration testing.
- Encryption of patient data in transit and at rest.

Bleepa development follows an embedded security development lifecycle.

## Cloud architecture & technical infrastructure

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Bleepa is hosted within secure UK-based cloud infrastructure designed to deliver high availability, scalability and strong data protection. Key features include:

- High-availability architecture designed to support continuity of service.
- Redundant compute and storage layers to improve resilience and performance.
- Customer data segregation to maintain logical separation between environments.
- Controlled access and governance measures to protect systems and information.
- Infrastructure designed to support service availability of 99.9% or higher.



# Integration and interoperability

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Our integrations with national systems - such as NHS England's e-Referral Service (e-RS) and GP Connect - support interoperable, secure data exchange, accelerate pathway deployment and enhance clinical decision making for both providers and patients across the NHS.

- **e-RS integration** - clinicians benefit from streamlined digital referrals and reduced manual workflow steps, improving productivity and user experience.
- **PDS** - Synchronisation ensures accurate patient identification and up-to-date demographic information, reducing duplication, misidentification and communication errors across organisations.
- **GP Connect** - enables clinicians in secondary care to securely share documents back to GP systems to support safer, faster and more coordinated care.
- **Radiology information system (RIS)** - We receive orders from Wellbeing Software CRIS and can handle radiology reports.
- **Order comms** - We integrate with Clinisys ICE order comms to receive orders and results.
- **Laboratory information management systems (LIMS)**: We handle reports from Clinisys WinPath.

Bleepa also integrates with a number of other document management, patient management, patient engagement and referral systems in primary and secondary care. We can interoperate with additional healthcare IT systems depending on customer needs.

## Integration engine

We use the industry standard Mirth healthcare integration engine, supplemented with our own custom libraries, to manage incoming and outgoing messages. This supports HL7, FHIR, direct SQL connection and web services.

Typical scenarios include:

- Use of ADT (Admission, Discharge, Transfer) messages to update the location and status of patients.
- Use of OMG (Generic Clinical Order)/ ORM (Order Entry message)/ ORU (Observation Results Unsolicited) messages to track the status of examinations and results from radiology, labs, etc.
- Use of SIU (Scheduling Information Unsolicited) to track out patient appointments.
- Use of MDM (Medical Document Management) to export transcripts of conversations on discharge.

## Electronic patient record systems

We have HL7 connections with Cerner Millennium, CLINiCOM, and Lorenzo.

## PACS systems

We have connections to picture archiving communication systems (PACS) Insignia, GE, Sectra, and Phillips PACS for sending, receiving, and querying DICOM images.

PACS retrieval is enabled through DICOM Store, CFind and CMove.

## Patient engagement platforms

We integrate with personal health record and patient engagement solutions such as Patients Know Best to reduce duplication, streamline communication, and empower patients to take an active role in their care.

Clinicians can manage referrals, review documentation, and access patient-submitted information within a single workflow in Bleepa, while patients receive clear communication, questionnaires, and pathway updates through their platform, including via the NHS App.

## Authentication, access control & GDPR compliance

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Authentication supports NHS CIS2, NHSmail and OpenID Connect single sign on. Role-based access control ensures users only access the minimum patient information required for their role. Additional safeguards include:

- Zero-footprint application (no patient data stored on personal devices).
- Automatic session timeout.
- Enforced password policies.
- Optional disabling of screenshots, copying or pasting.

All access to patient data is fully audited and can be exported to satisfy Subject Access Requests or Right to Erasure requests. Bleepa stores all patient data exclusively within the UK.

## Business continuity, disaster recovery & resilience

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Feedback Medical operates a robust business continuity plan with regular disaster recovery simulations. Automated backups and multi-AZ redundancy allow rapid system restoration if required.

The architecture separates processing from the data, allowing rapid failover and consistent uptime even during disruptions.

This resilience ensures hospitals can rely on always-available access to imaging and clinical collaboration tools.



## Training and support

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Bleepa is developed following modern agile practices, which means we continuously solicit feedback from end users, and improve the product with each and every update. This ensures that our products are simple, user-friendly, self-explanatory and necessitate minimal training.

We provide a range of training materials for users to ensure that they are able to use the product fully and as intended. These training materials have all been road tested with service users and accommodate a range of learning styles and technical competencies.

In addition, ongoing support can be accessed through our customer support channels including the Bleepa help desk. This includes access to:

- A dedicated Bleepa support email.
- Telephone support.

Bleepa is available 24 hours a day, 7 days a week during the contract term except for periods of planned maintenance. Our team will provide telephone and email support during normal business hours.

## Getting started

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Simply contact [sales@fbkmed.com](mailto:sales@fbkmed.com) to arrange a consultation, demo or pilot. We'll assess your needs and recommend the ideal implementation approach.

We offer guided demos that show how our collaboration tools support faster, safer clinical care.

Once integration and onboarding are complete, teams can begin using the platform immediately with full support from our implementation specialists.