

Nelson+

Service Definition

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Nelson+ Lung Screening Management Solution

Secure SaaS Management Solution for Lung Cancer Screening Programmes

Nelson+ is a secure, cloud-based lung cancer screening participant management platform designed to streamline every step of the screening workflow, from invitations and eligibility to CT booking, reporting and follow-up. The platform supports hospital and GP system integration, meets the highest standards of healthcare data protection and is fully compliant with NHS lung cancer screening requirements.

What the service helps you achieve

Nelson+ helps screening programmes to:

- Improve screening uptake and adherence through supported recruitment strategies and structured participant pathways
- Reduce reliance on manual spreadsheets via configurable workflows, dashboards, alerts and automated communications
- Track performance using KPI dashboards and reporting aligned to programme reporting needs
- Deliver consistent, high-quality screening operations through controlled workflows, traceability and quality management features

End-to-end Workflow supported by Nelson+



Nelson+ supports longitudinal participant management across multiple screening rounds, maintaining a complete screening history over time. Workflow progression and decision points are driven by configurable rules that take account of participant history, screening results and programme-specific policies, enabling consistent and repeatable pathway execution as programmes evolve.

Together, these capabilities support the full screening lifecycle, including:

- **Population Management:** Identify and manage eligible cohorts, support population registry inputs (where available), and apply risk models (including LLPv2 and PLCom2012) to help target invitations effectively. Eligibility rules and thresholds can be updated over time to reflect evolving guidance.
- **Planning:** Plan capacity and programme delivery using operational dashboards and tools that support appointment and CT scheduling across sites and teams.
- **Invitation:** Manage invitations, reminders and communications using configurable templates and workflows, supporting consistent outreach and administration.

- **Examination:** Capture and track lung health check and CT examination status, ensuring each participant progresses through the pathway with full traceability.
- **Reading:** Support structured reading workflows, including options such as double reading and discrepancy resolution where required, and enable integration with third-party AI reading tools where procured.
- **Results:** Generate results outputs using configured templates and decision-tree driven pathways, supporting consistent reporting and timely communications.
- **Follow-up:** Manage surveillance and follow-up pathways, including nodule tracking and prioritisation, and configurable incidental findings workflows (e.g., CAC and COPD/emphysema), with monitoring and alerts.

The platform supports operational exception handling across the pathway, including missed appointments, incomplete examinations and delayed readings. Exceptions are visible through operational dashboards ensuring each participant progresses through the screening pathway.

Core platform strengths

These capabilities support the programme end-to-end, giving teams the tools to work consistently, leaders the visibility they need, and services the connectivity required for safe delivery:

- **Configurable pathways and governance:** workflows, decision points, rules and templates are configurable to align with programme models and clinical protocols, supporting consistent pathway execution without reliance on manual intervention.
- **Operational visibility:** dashboards, worklists and monitoring features that support day-to-day operational delivery, helping teams prioritise work, manage exceptions and track progress across the screening pathway.
- **Reporting & quality management:** KPI reporting and quality controls support operational and clinical governance, including monitoring of turnaround times, reading workflows, follow-up compliance and programme performance.
- **Interoperability by design:** integrations with hospital infrastructure and third parties reducing duplication and improving data flow.
- **Security and traceability:** role-based access controls and comprehensive audit trails record user actions, pathway progression and data changes, supporting operational oversight, clinical governance and accountability.
- **SaaS delivery:** delivered as a cloud-hosted service with ongoing support, updates and configuration to meet evolving programme needs.

Communications

Nelson+ includes a communications module to support consistent participant and stakeholder communications across the screening pathway. Communications are generated from configurable templates and can be triggered automatically by pathway events, such as invitations, reminders, results and follow-up, helping programmes standardise messaging and reduce manual administration.

Key capabilities

- **Template-based letters:** Create and manage programme-specific letter templates (e.g., invitations, reminders, results and follow-up letters). Letters can be generated directly from the pathway and made available for distribution according to the programme's operating model.
- **Event-driven communications:** Trigger communications based on workflow status and decision points, supporting consistent delivery across sites and teams.
- **Electronic delivery channels:** Messages can be delivered through electronic channels such as SMS, email and WhatsApp, using customer-provided messaging services and subject to configuration, access and approvals.
- **CSV data exports:** Generate CSV exports to support downstream processes (e.g. data exchange with external services).
- **Traceability:** Record communication events and generated outputs against participant records to support operational follow-up and auditability.

Analytics and reporting

Nelson+ combines an anonymised analytics database with business intelligence dashboards to support operational oversight, performance monitoring and programme evaluation.

Insights Database

The Nelson+ Insights analytics database aggregates anonymised screening data to support programme-wide KPI monitoring, reporting and performance analysis. Customers can access and extract data from Insights and connect⁽¹⁾ it to their own analytics and reporting solutions using their preferred tools and processes.

(1) Any onward use or integration of the Insights data is managed by the customer, subject to their governance and approvals.

BI Dashboards

Nelson+ includes a set of five BI Dashboards that provide operational and programme-level insight across the screening pathway. Together, they support day-to-day management, performance monitoring and governance through clear, actionable views.

- **Participation and engagement:** Visibility of how effectively the programme is engaging the eligible population, including response to invitations, participation trends across practices and demographics, and areas where outreach strategies may need reinforcement.
- **Programme throughput and capacity:** An at-a-glance view of screening activity over time, supporting capacity planning, performance monitoring across screening units, and assessment of whether delivery is keeping pace with programme demand.
- **Reporting timeliness:** Insight into how quickly studies progress through the workflow, from examination to results communication, helping teams monitor turnaround times, identify delays, and improve operational efficiency.
- **Referrals and escalation:** Visibility of referral patterns and downstream demand, supporting clinical governance by highlighting escalation rates, trends over time, and the diagnostic yield of the screening programme.
- **Follow-up and diagnostic outcomes:** Overview of final diagnostic outcomes for participants in follow-up pathways, supporting surveillance tracking, long-term programme evaluation, and assessment of clinical impact.

Integration and Interoperability

Nelson+ operates as a standalone SaaS platform and supports integration with existing healthcare infrastructure using standard interfaces. Integration may include HL7-based messaging for imaging-related workflows, selected AI or teleradiology providers, and the transfer of reporting outputs to external systems.

Integration scope and delivery approach are agreed during onboarding based on the Buyer's systems, access arrangements and programme requirements.

Client portal

Nelson+ offers an optional Client Portal to support participant engagement and reduce administrative workload. The Client Portal is not enabled by default and may be made available where requested by the Buyer, subject to programme requirements and configuration.

Where enabled, the Client Portal allows participants to securely:

- View and manage appointment availability
- Schedule, reschedule or cancel appointments based on real-time capacity
- Review and verify personal details to improve data accuracy
- Access available results, subject to programme configuration and governance

The Client Portal can be delivered as a Phase 2 enhancement, with a budget to be defined following detailed requirements analysis and agreement with the Buyer, using the applicable unit rates defined in the G-Cloud Pricing Document.

Security, compliance and data protection

Nelson+ is designed for healthcare screening programmes and includes security controls that support safe operations, including role-based access, audit trails, and traceability of user actions and record changes.

Nelson+ operates under an ISO 9001–certified quality management system supporting consistent delivery and continuous improvement. The service aligns with UK public sector security and privacy expectations, including UK GDPR–aligned practices and recognised assurance measures such as the NHS DSP Toolkit and Cyber Essentials.

Service Scope

Nelson+ is provided as a hosted SaaS service and includes:

- Access to the Nelson+ platform
- Configuration of workflows, dashboards and reporting aligned to the Buyer's programme model
- Implementation and onboarding services (see Implementation Approach)
- Training for operational and clinical users (remote and/or onsite options)
- Ongoing technical support, maintenance and platform updates

Implementation and Onboarding Approach

Implementation Approach

Nelson+ follows a structured onboarding approach designed to get programmes live efficiently while maintaining operational and clinical readiness. Implementation is tailored to the Buyer's requirements and may include configuration-only onboarding, onboarding with integrations, phased rollout, and post go-live enhancements, depending on programme complexity and dependencies.

Standard Implementation Option

For Buyers adopting standard Nelson+ workflows without bespoke integrations or customisations, a test environment can typically be available within approximately one month, with go-live achievable within approximately three months. Indicative timelines are provided for planning purposes and are confirmed during implementation discovery.

Enhancements after go-live

Enhancements after go-live are delivered through formal change management, subject to scoping, prioritisation and approval by the Buyer. Enhancement services are provided on a chargeable basis, with applicable unit rates defined in the G-Cloud Pricing Document.

Support

Nelson+ provides ongoing support and maintenance for the SaaS service, helping customers keep programmes running smoothly day-to-day. Support includes a central service desk for questions and incidents, triage and escalation to specialist teams, and the delivery of platform updates and fixes as part of continuous improvement.

Support includes:

- Service desk for incidents, questions and operational support
- Ticket triage, prioritisation and escalation to specialist support
- Defect investigation and resolution (including fixes and patches)

Support hours, response targets and service levels are agreed as part of the contract/SLA.