

Project Title:

**Soft Market Research (SMR) for an Electronic Medicines Tracking System**

South Central Ambulance Service NHS Foundation Trust

Project Brief and Questionnaire

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# Part 1: Project brief

## Aim of Soft Market Research

The Trust is committed to its strategy of being “Fit for the Future,” yet current medicine systems, which include a self-built IT system, a generic ordering system, and paper-based documentation, fall short of both legislative requirements and future-proofing needs. These outdated systems are not only unreliable and time-consuming for pharmacy, procurement, and frontline operational staff, but they also pose significant risks to patient safety due to their inability to rapidly track and manage medicine supplies. This situation has resulted in numerous incident reports related to missing medications, with investigations often being lengthy and inconclusive.

In alignment with the NHS sustainability agenda of achieving ‘net zero’ by 2040, this soft market testing exercise to inform SCAS about sourcing and implementing an electronic system that can effectively track and trace medicines throughout their lifecycle within the Trust, eliminating the reliance on paper-based processes. The successful outcome of such a solution is anticipated to reduce corporate risk, generate cost savings, and enhance service delivery efficiency.

## The Current Service

The Ambulance Trust's current medicine management system relies heavily on manual processes, primarily paper-based records and Excel spreadsheets. This fragmented approach to tracking inventory, orders, and controlled drugs leads to inefficiencies and errors. Staff struggle with time-consuming documentation, hindering their ability to provide optimal patient care. Additionally, locating specific medications can be challenging, potentially impacting patient safety and delaying treatment. The current system also presents difficulties in managing controlled drugs securely and ensuring adherence to regulations.

Here's a breakdown of the key areas the soft market research will explore:

* **Medicine Ordering and Procurement:** We will assess systems that streamline the ordering process, optimize stock management, and ensure efficient communication with suppliers.
* **Inventory Management:** The research will evaluate solutions that provide real-time visibility into medicine stock levels across all Trust locations, minimizing the risk of stockouts and overstocking.
* **Dispensing and Administration:** We will investigate systems that support accurate dispensing of medications, improve record-keeping, and enhance medication safety practices.
* **Controlled Drugs Management:** The research will prioritize systems that ensure secure storage, tracking, and audit trails for controlled drugs, adhering to all relevant regulations.
* **Reporting and Analytics:** We will evaluate systems that generate reports on medicine usage, expiry dates, and potential medication discrepancies, enabling data-driven decision-making.

Integration with Existing Systems

To ensure seamless adoption within the Trust, the soft market research will prioritize solutions that integrate effectively with our existing IT infrastructure. Here are some key interfaces that will be considered during the evaluation process:

* **Pharmacy Management System (PMS):** The new track and trace system should integrate seamlessly with the PMS to streamline medication ordering, dispensing, and stock control functionalities.
* **Finance System:** Integration with the finance system is crucial for accurate budgeting, expenditure tracking, and cost analysis of medicines.
* **Electronic Patient Records (EPR):** Real-time access to patient medication history within the EPR is essential for improved medication safety and continuity of care.
* **Procurement System:** The track and trace system should integrate with the procurement system to facilitate efficient ordering processes and supplier management.

By focusing on these key aspects, the soft market research will provide valuable insights to select a comprehensive track and trace system that addresses our current shortcomings, enhances operational efficiency, and aligns with the Trust's long-term vision for a modernized medicine management system.

## The Need

The Ambulance Trust (SCAS) currently utilizes an on-premises medicine management system. To enhance functionalities and ensure long-term effectiveness, we're exploring market options for a new track and trace system.

Key Requirements:

* **Alignment with Business Needs:** The new system must address our specific needs and offer cost-efficient solutions to support the future of SCAS services.
* **Proactive Partnership:** We seek a collaborative relationship with a vendor who shares our vision for continuous improvement and innovation.
* **Scalability and Adaptability:** The system should accommodate current needs while being adaptable to meet evolving requirements from internal staff, external partners, patients, and future digital integration.
* **Regulatory Compliance:** Adherence to relevant regulations and NHS best practices is essential for optimizing patient care.
* **Cost-Effectiveness:** The solution should be robust, feature-rich, and deliver value for money.
* **Cloud Compatibility:** We are considering transitioning our Computer Aided Dispatch (CAD) system to the cloud within the contract term. Insights from this market research will inform future procurement decisions regarding cloud-based solutions.

Vendor Requirements:

We invite responses from manufacturers with experience providing Commercial Off-The-Shelf (COTS) solutions for:

* UK Ambulance Services
* NHS
* European Ambulance Services
* Other UK Emergency Services (Police, Fire & Rescue)

## Timeline for soft market testing

|  |  |
| --- | --- |
| Milestone | Dates |
| Soft Market Research Questionnaire Published  | 06/08/2024 |
| Soft Market Research Questionnaire Submission Deadline | 10/09/2024 |

# Part 2: Soft Market Research Questionnaire

## Participating in the Soft Marketing Research Exercise

We would welcome your participation in our Soft Market Research exercise. Please complete and return this questionnaire to either Chris.Keenleyside@scas.nhs.uk or Dawid.Macherzynski@scas.nhs.uk

Please note that this questionnaire has been issued by SCAS purely for information seeking purposes and does not form part of any procurement process. Interested parties should note that a response to this questionnaire does not guarantee an invitation to tender for any services which SCAS may advertise, nor that SCAS will procure any such services or accept any proposals offered. Conversely, not participating in the soft market research exercise will not exclude any party from any involvement in any SCAS procurement process for a new track and trace system.

For the avoidance of doubt this document does not constitute an offer open to acceptance. Whilst we are collecting information to inform our decision making there is no guarantee that we will be issuing an ITT in the near future.

As part of this soft market research, there will be an opportunity for you to present, discuss and demonstrate your solution to SCAS. This would be via TEAMs

In particular, SCAS is interested in seeing:

* How your system presents caller information to the agent receiving the call.
* How it facilitates the contemporaneous recording of notes when a 999 call is received.
* How your system integrates with an external triage system such as NHS Pathways
* How all transactions are recorded for audit purposes including:
* **System transactions** such as the time a call was presented to an agent.
* **Active transaction** such as recording the user and timestamp associated with making additions to a record.
* **Passive transaction** such as the user and timestamp associated with searching for a record.
* How your system records Nature of Call, DX (disposition) Codes, Symptom Groups and Symptom Discriminators and how these are made available for future incident investigations.
* How your system facilitates the auditing of telephone triages to see how well they have been conducted.
* How your system presents the location of incidents.
* How it presents the location and availability of resources.
* How it enables resources to be dispatched to an incident.

When submitting your responses to the questionnaire please confirm whether you would like to attend a Teams event on any of the dates advertised to demonstrate your solution and/or present your thoughts or proposals.

**Soft Market Research (SMR) for an Electronic Medicines Tracking System**

**South Central Ambulance Service NHS Foundation Trust**

## Section 1 – Questionnaire: Supplier Information

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| Name of Organisation: Address: |

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| Contact Name: Contact Details:Telephone:Email: Website address: |

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| We would be available to present our solution on:[ ]  13/09/2024[ ]  20/09/2024[ ]  27/09/2024[ ]  04/10/2024 |

## Section 2 – Questionnaire

### Solution

The South Central Ambulance Service (SCAS) NHS Foundation Trust is seeking to determine if a Commercial off The Shelf (COTS) electronic tracking system is available to replace the current medicines systems, which include a variety of different platforms such as paper-based documentation, Microsoft Excel, Orkos (an in-house system), Modus (created by sub-contractor Churchill), Ortivus (Electronic Patient Record and medicines administration), and SCRIBE (links documentation to the EPR). The current system is complex and prone to errors due to its heavy reliance on human input, which has been documented as a risk on the Trust's risk register.

When developing any future procurement requirements, we need to understand what, if any, functionality is currently not available in your system and when such functionality may become available. Please provide examples of where your system has been successfully implemented within a healthcare setting in the UK or Europe.

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#### 2.3.1.a. Barcode Scanning and Integration with EPR:

Is it possible for your system to scan medicine barcodes and automatically update the Electronic Patient Record (EPR) system about medicine usage? Can it also integrate with stock management systems and an electronic controlled drugs (CD) register to ensure real-time tracking of medicine inventory?

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#### 2.3.1.b. Real-time Tracking of Medicine Bags:

Can your system scan and track the contents of medicine bags, providing real-time updates on their status (red, amber, or green) to users? How does your system achieve this, and what user interface is used to display this information?

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#### 2.3.1.c. Integration with Existing Systems (Ortivus and SCRIBE):

Is your system capable of integrating with existing systems like Ortivus and SCRIBE, including managing an electronic CD register? What are the integration capabilities of your system, and are there any existing implementations within healthcare settings that demonstrate these functionalities?

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### What are the key benefits of this solution compared to other available options in the market?

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### Integration with Existing IT Infrastructure:

This section of the soft market research proposal will investigate the potential track and trace system's ability to integrate with our existing healthcare IT infrastructure. Please provide information on the following:

#### 2.3.3.a. Integration Capabilities:

Can your system integrate with the following key systems currently in use at South Central Ambulance Service NHS Foundation Trust? Please indicate "Yes" or "No" for each system. If "Yes," please specify any existing APIs or required developments.

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| --- | --- | --- | --- |
| System | Integration (Yes/No) | Existing API | Comments |
| Electronic Patient Record (EPR) |  |  |  |
| Ortivus |  |  |  |
| SCRIBE |  |  |  |
| Microsoft Excel |  |  |  |

#### 2.3.3.b. API Development:

Are you willing to develop additional APIs if required to ensure full integration with our systems? Please provide details on your capability and approach to API development.

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#### 2.3.3.c. Multi-Factor Authentication (MFA) Compliance:

Does the system meet the NHS mandatory requirements for MFA (all users and admins including suppliers must use MFA to access the system)?

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| Click or tap here to enter text. |

### High Availability and Cloud Solutions.

In light of the Trust's requirement for high availability, please provide detailed responses to the following:

#### 2.3.4.a. Deployment Type:

Is your solution deployed primarily in the cloud, on-premise, or as a hybrid system?

What are the perceived benefits and challenges associated with each deployment method?

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#### 2.3.4.b. Business Continuity:

What additional infrastructure (circuits, hardware, etc.) is necessary to ensure business continuity? If the internet is not available how would the system still provide on-site availability?

What provisions are in place for disaster recovery?

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#### 2.3.4.c. Management and Migration:

Do you manage the deployment and ongoing maintenance of your solution?

Have you previously managed migrations for healthcare customers between on-premise and cloud environments?

What key lessons have you learned from these migrations?

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#### 2.3.4.d. Costs:

What are the one-off and ongoing costs associated with cloud-based solutions compared to on-premise installations?

How do these costs impact overall value and budget?

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### Statutory Change and Innovation

South Central Ambulance Service (SCAS) is looking for a supplier who demonstrates ongoing investment in their product to meet statutory requirements and enhance usability and capability. Please address the following:

2.3.5.a. Recent Key Changes:

Describe two significant changes or updates that have been implemented in your system over the past year. Explain why these changes were crucial and how they align with statutory requirements or enhance system functionality.

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#### 2.3.5.b. Planned Changes:

What are the two key changes or innovations you plan to implement in the next 12 months? Please detail how these changes will address statutory requirements and improve the system.

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#### 2.3.5.c. Ensuring Compliance:

How do you ensure that your system remains compliant with statutory and NHSE (NHS England) requirements? Describe your process for monitoring and implementing statutory changes.

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#### 2.3.5.d. Prioritization and Communication:

How do you prioritize improvements and innovations? Outline the process for managing these changes, including how they are controlled and communicated to stakeholders.

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### Control of Sensitive data

SCAS requires partners who appreciate the sensitivity of the data and processes we manage. We also need assurances that partners meet the same stringent standards as placed on all NHS providers. Please describe how data managed by your solution would be controlled and monitored, with special attention to the storage, management, and security of Personal Identifiable Data (PID).

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### Security

If your solution is wholly or partially Cloud-based, do you have datacentres in which SCAS data would be stored? Are these located within the UK? If not, please explain where they are now and whether you would consider locating datacentres in the UK for the provision of a service to SCAS?

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### Compliance with Digital Security and Protection Standards

Please provide detailed information on how your solution aligns with the Digital Security and Protection Toolkit (DSPT 2018), which is a mandatory standard for all NHS suppliers. If you have completed the NHS DSPT what is your current rating? Please include details on the implementation of multi-factor authentication and encryption of data at rest.

Additionally, confirm whether you have completed:

a)DCB129 documentation, including the Clinical Safety Management Plan, Hazard Log, and Clinical Safety Case Report, for your solution.

b)Digital Technology Assessment Criteria

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### Reporting: internal performance and statutory returns

How will your system provide reports for SCAS to allow internal and external performance monitoring requirements to be met?

What types of reports can be produced?

Are there standard reports available within your system?

Is there a reporting tool included that we could use to configure and generate our own custom reports?

Can you provide examples of standard reports and demonstrate the flexibility of the reporting tool in creating bespoke reports tailored to SCAS needs?

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### Implementation / Data migration

To gain valuable insights for our medicine tracking system implementation, we'd be interested in learning about:

* Recent data migration projects within the healthcare industry (e.g., hospital system transitions).
* Key challenges encountered during those projects, particularly regarding data quality and migration processes.
* Best practices identified for successful data migration, such as phased rollouts or communication strategies.

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### Training & Support

Please provide two examples of undertaking a similar-sized training program, including details of how you approached this. What are the key lessons you have learned regarding what works well?

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### Support and professional services

Please outline any support arrangements and additional services you could offer to maintain any proposed system.

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### Implementation

To plan effectively, we'd appreciate information on:

* Your typical implementation methodology for similar projects.
* Resource allocation (your team & SCAS) for a smooth implementation.
* A general timeframe for implementation (understanding final timelines depend on specifics).

This information helps us plan and budget for a successful track and trace system implementation.

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### Maintenance and support

For smooth medicine tracking operations, we need a reliable system. Please outline your:

* Support availability (hours, response times for critical issues)
* Uptime guarantee for the track and trace system
* Patch management approach (minimizing disruption)
* Planned downtime scheduling process
* Communication protocol for unplanned outages

Understanding your maintenance and support ensures your system meets our needs.

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### Do you have practical experience of designing the implementation of a electronic tracking system that minimises any downtime?

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### Annual Costs

To assess affordability, please detail:

* Your licensing model
* Development cost approach for integration & medicine tracking needs.
* Indicative annual licensing & implementation cost ranges.

This info helps us evaluate affordability of your system.

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| Click or tap here to enter text. |

### Please state if you would be interested in bidding for this work giving reasons why it may be attractive.

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### Attractiveness of the Opportunity and Compliance with Standards

Please address the following points:

#### 2.3.18.a. Is your solution compliant with the following ISO standards?

If so, please explain how:

* ISO 13485 for medical device quality management systems (iso.org, ISO 13485, 2024)
* ISO 14971 for risk management in medical devices (iso.org, ISO 14971:2019, 2024)
* IEC 62304 for medical device software lifecycle processes (iso.org, IEC 62304:2006 Medical device software — Software life cycle processes, 2024)
* ISO 27001 for information security management systems (iso.org, ISO/IEC 27001:2022 Information security, cybersecurity and privacy protection — Information security management systems — Requirements, 2024)
* ISO 27701 for privacy information management (relevant for GDPR compliance) (iso.org, ISO/IEC 27701:2019 Security techniques — Extension to ISO/IEC 27001 and ISO/IEC 27002 for privacy information management — Requirements and guidelines, 2024)

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#### 2.3.18.b. How does your system address the requirements of the following UK regulations:

How does your system address the requirements of the following UK regulations:

* The Medicines and Healthcare products Regulatory Agency (MHRA) guidelines (gov.uk, Services and information, 2024)
* The Data Protection Act 2018 (gov.uk, Data protection, 2024)
* The Health and Social Care Act 2012 (gov.uk, 2024)

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2.3.18.c. Does your solution comply with any health informatics standards: such as those in the IEC 81001 series for health software safety, effectiveness, and security (iso.org, 2024)?

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| Click or tap here to enter text. |

### Please can you confirm if you are on any current framework and or if your services can be purchased via a preferred reseller

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### Medicine Ordering and Procurement

Does your system include a medicine ordering and procurement module? If so, please describe its key features and how it optimizes the ordering process and stock management.

How does your system ensure efficient communication with suppliers? Please provide details on any integrated communication tools or protocols.

Can the system integrate with existing procurement platforms or software? If yes, please describe the integration process and any associated benefits.

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### Dispensing and Administration

Does your system have a dispensing and administration module? If so, please provide a detailed description of its functionality and how it supports accurate medication dispensing.

How does the system enhance medication safety practices? Include details on any safety checks, alerts, or verification processes.

Can the system integrate with electronic patient records (EPR) for seamless medication administration? If yes, please describe the integration.

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### Controlled Drugs Management

How does your system manage the secure storage and tracking of controlled drugs? Describe the features that ensure compliance with relevant regulations.

Does your solution include audit trails for controlled drugs? If so, please outline how these trails are maintained and accessed.

What security measures are in place to prevent unauthorized access to controlled drugs within the system?

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### Reporting and Analytics

What reporting and analytics capabilities does your system offer? Please provide examples of reports generated, such as medicine usage, expiry dates, and discrepancies.

How does the system support data-driven decision-making? Include details on any dashboard features, data visualization tools, or analytical insights provided.

Can the system integrate with existing reporting tools or data warehouses? If so, describe the integration process and benefits.

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### Key Interfaces and Integration

What key systems does your solution need to integrate with? Please provide a list of common interfaces, such as EPR systems, procurement platforms, and inventory management tools.

How does your system handle integration with other healthcare IT systems? Describe the integration capabilities, including any APIs or data exchange standards used.

Are there any specific requirements or considerations for integrating with existing systems in our Trust? Please outline any potential challenges or solutions.

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