

ICS Supply Chain Pilot

National Report Summary

November 2023

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Background and Context

Across the last three years, services across the NHS have been significantly impacted by UK and global events, including Covid, Brexit, the war in Ukraine and impacts from political and climate turbulence. The influence of these events has been particularly evident on product supply chains, leading to extremes in demand and supply volatility and an ongoing range of critical shortages.

This disruption, in turn, has exposed the fragility of supply chains across NHS trusts, undermined by a lack of investment in systems, skills, resources and improvement programmes.

In 2022, NHS Supply Chain commissioned a National ICS Supply Chain Study. Working with Unipart Consultancy, the aim was to identify opportunities to strengthen the resilience, efficiency and service performance of supply chains for consumable products across the NHS, focussing on the contribution and leadership made possible by emerging and collaborative ICS structures/organisations.

The study identified a series of opportunities for ICSs to lead and support supply chain development at local, regional and national level, focussing strongly on inventory management as the core driver of supply chain cost and performance.



Findings from the National ICS Study

The national study identified clearly that maturity in inventory management across the NHS is typically low (measured against the Supply Chain Maturity Model) and that improved inventory management at local level is the single biggest driver of improved quality and resilience. ICS-led improvement at local and regional level could strengthen service performance and unlock savings of up to £11 million per ICS.

Key findings included:

- Across the NHS, there are significant issues on stock integrity and a substantial % of the stock on the shelves is either Slow Moving or Obsolete, driving overflow of storage and demand for unnecessary extra space within hospitals .
- A lack of adequate data and data maintenance is leading to increased shortages and driving either complete stock outs or stock excesses.
- Only 50% of trusts in the study had an inventory management system in place, with no standard approach and a general lack of optimisation of functionality. In addition, whilst an IMS is a key enabler, the system alone is not enough to leverage full value and there was a lack of the essential processes, resource structure, IM training and workflows to drive savings and service improvement and much can be done without an IMS.
- Most colleagues involved in inventory management and responsible for ordering millions of pounds of products have never been trained.

One-off working capital saving:

**Average ICS £5 million
to £8 million**

**Average acute trust
£1.3 million**

Ongoing operating cost
saving:

**Average ICS £1 million
to £3 million**




**Average acute trust
£500,000**

Findings from the National ICS Study

Maturity Assessment Attribute

Characteristic	Network Design	Process	Systems & technology	People and Org Capability
Planning	Reactive	Reactive	Reactive	Reactive
Purchasing	Managed	Managed	Reactive	Reactive
Inventory Management	Reactive	Reactive	Reactive	Reactive
Storage Warehousing	Managed	Reactive	Reactive	Reactive
Distribution & Transport	Reactive	Reactive	Reactive	Reactive
Return	Reactive	Reactive	Reactive	Reactive

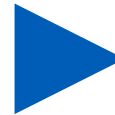
Key

 Reactive organisation	 Managed organisation	 Optimised organisation
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Recommendations from the National ICS Study

The national study recommended a series of priority actions that should be taken forward by ICSs:

- Set IMS implementation standards (and resources), and best practice for deployment and utilisation. Help trusts to get to the minimum suggested practice.
- Develop regional oversight and standardised approach to Service, Cost and Input KPIs.
- Documentation and deployment of full suite of quarterly, monthly and weekly processes, with regional training and best practice facilitation organised and delivered.
- Create templates and standards for master data management and associated auditing.
- Enable trusts to access the intermediate value from process improvement that can be achieved across trusts without an IMS.
- Develop ICS inventory services, such as aggregation of current inventory, future space use, and future requirements in terms of inventory holdings with resiliency planning for substitution, alternate supply, excess, reuse and shared inventory at a regional level.



A single ICS Inventory Management Pilot

Given the scale of benefits identified, a second project phase was developed to focus on the role of the ICS in leading and enabling programmes of work to guide and accelerate improved inventory management performance.

This second phase took the form of a dedicated pilot with a single ICS to implement the recommendations from the national report.

After a careful selection process, North Central London was chosen as the pilot ICS, based on a combination of factors including established collaborative model, data availability, resource availability and enthusiasm.

This document provides an overview of this work.

Study development

Evaluation

- A thorough evaluation of prospective candidates was carried out in April 2023 leading to the selection of North Central London (NCL) ICS as the candidate for the Development Pilot. NCL comprises of 12 NHS trusts and over 20 hospital locations between Central London and Stanmore close to the M25.

Mobilisation

- The program was initiated in May 2023 running through to August 2023.
- The core team met twice weekly to review progress and feedback was also relayed to NHS Supply Chain via a weekly project review.

Study focus

- The prime objective of the program was to design “Best in Class” inventory management processes that would increase levels of supply chain maturity within the ICS and in turn would align with ICS priorities and release resources for improved patient care.
- The Pilot considered NCL ICS pressures and how supply chain strategy and priorities could provide supportive solutions.

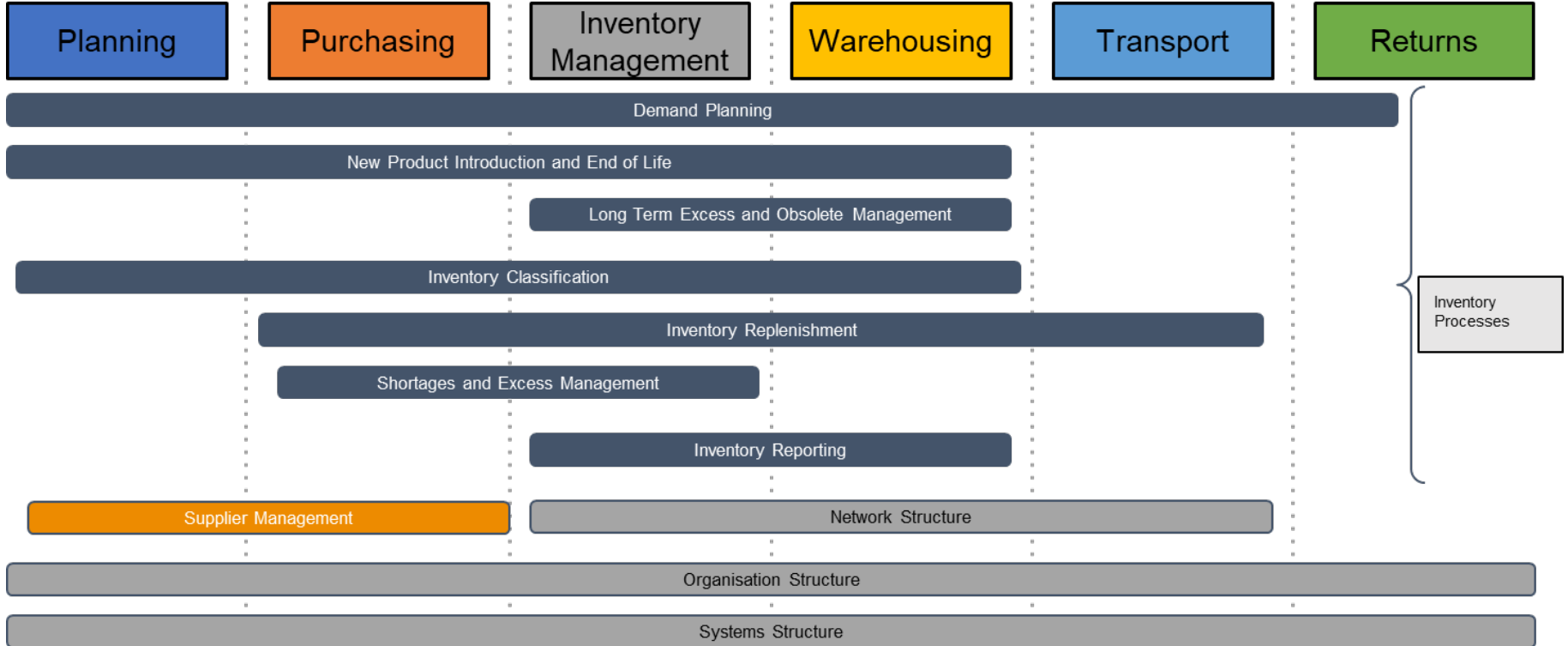
NCL ICS priorities and alignment with Pilot

	ICS Priority	ICS Pressures	Supply Chain Priorities	ICS “Best in Class” Pilot Process Solutions	Benefits
1	Delivery of improved operational performance (OPEX)	Inefficient use of resources: <ul style="list-style-type: none"> Time: Clinician time on non clinical work Space: Hospital space used as storage £: on excess inventory £: Wasted materials 	Reduce spend on material waste and obsolescence and Reduce clinical time spent on on clinical work.	<ul style="list-style-type: none"> Inventory Classification Inventory Replenishment Demand Planning Financial Inventory Reporting 	These processes will optimise the use of resources and eliminate unnecessary waste. This will include the measurements to determine improvements.
2	Delivery of Financially sustainable plan.	Significant cost pressures and need to produce a sustainable ICB break even plan with savings and improved patient flow and pathway	Improved coordination and sharing of scarce resources and information between sites and trusts.	<ul style="list-style-type: none"> Shortages and Excess Management New Product Introduction and EOL Supplier Management Long Term Excess and Obsolete Management 	Transition from trust specific to ICS specific process alongside systemic visibility tools will deliver both efficient use of scarce resources and economies of scale
3	Delivery of Cradle to Grave Population Health Strategy	Year on Year Rising Demand for Services putting pressure on ICS resources. <ul style="list-style-type: none"> People Premises Purse 	Deliver product availability and visibility despite ongoing disruption of supply	<ul style="list-style-type: none"> Demand Planning Network Structure Inventory Management Organisation Structure 	These processes will seek to align future resource needs (people, premises and purse) with rising demand for services. This will be articulated at exec level.
4	Delivery of improved operational performance. (Procurement)	Extreme inflation making “Clinical consumables, Medical devices and Medicines” purchases extremely volatile and variable in terms of both price and availability.	Contribute to 24/25 sustainable break-even plan with savings and productivity gains	<ul style="list-style-type: none"> Inventory Classification Demand Planning Inventory Management 	These dynamic processes will allow adaptation of inventory policies and resource plans to minimise the adverse impact of price changes.
5	Delivery of our People Strategy	Need to increase colleague sense of well being and deal with the difficulty with career progression particularly in ethnic communities.	Increase engagement through the development of supply chain career pathways	<ul style="list-style-type: none"> Organisation Structure Demand Planning 	These processes will be supported by a robust end to end supply chain organisation that offers skills development and career progression in a known field.

Approach

- The study undertook in-depth analysis of seven critical processes which support best in class inventory management.
- The study also considered the supportive infrastructure of network structure, organisational structure and systems structure, together with inbound supplier management.
- The study then designed optimised ICS processes and structures to improve performance. These are documented as blueprints, forming a user manual for all ICSs to consider and adopt.
- Finally, the study considered implementation.
- This study was heavily dependent on the resources, knowledge and good will of the North Central London team, who provided significant and essential insight and transparency to current ICS activity.

Approach



The Pilot Study Key Findings

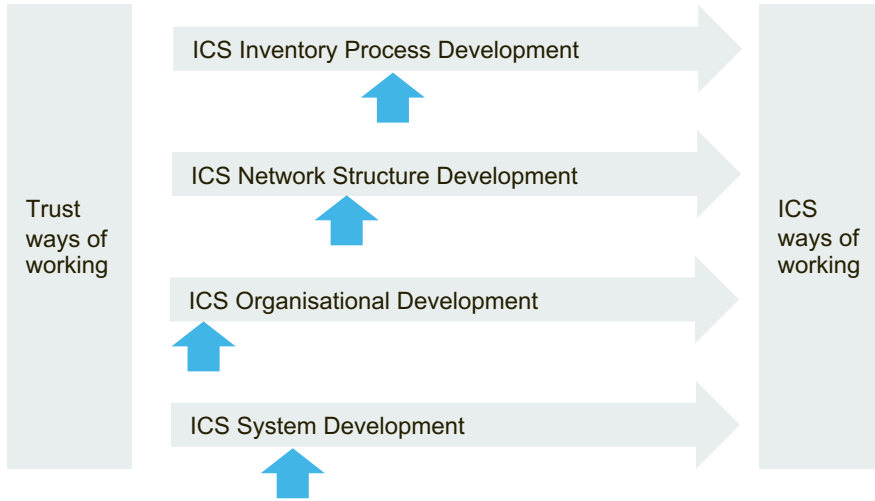


North Central
London ICS

- Multiple stocking points and Minimum Order Quantity (MOQs) inflating inventory holding
- Inventory is recorded as received and then “expensed” at the point of receipt rather than of consumption
- Absence of performance-based inventory reporting driving wrong behaviours
- Highly reactive and high-cost response to constrained supply due to absence of planning
- No inbound flow scheduling driving up operational costs
- Savings strategy driven by product price rather than total lifetime cost
- Low Inventory Management knowledge level amongst Inventory controllers
- Inconsistent organisation structures for supply chain
- No capability to use inventory systematically to manage demand and supply variability
- Multiple catalogues and data collection points within the ICS for new products
- Multiple high cost and replicated internal distribution networks deployed within trusts
- Some facilities in RNOH not fit for purpose
- Good use of “Self Help “ mechanisms
- High level of Supply Chain collaboration across the ICS creates a strong platform for improvement and maturity advancement

Key ICS Recommendations to Drive Inventory Management Maturity

Each ICS is recommended to establish a baseline and create a plan for their collaborative supply chain development. The baseline arrows below are indicative



The journey of each ICS will vary dependent on its starting point

Summary recommendations for progression

- Start measuring ICS Inventory Performance
- Start Training teams on “Effective Inventory Management” whether IMS enabled or not and give them Inventory visibility tools
- Start building “Demand Planning “ capability within each IMS team
- Start Classifying ICS Inventory according to Service, cost and risk in order to better utilise resources
- Start to introduce ICS Inventory and Operations Planning process to reduce cost of misaligned supply and demand
- Create an aspirational ICS Supply Chain strategy around the new ICS Process templates
- Create an aspirational ICS Supply Chain organisational strategy that reflects current levels of maturity as an ICS and aligns with future state supply chain processes
- Create an aspirational ICS IT strategy that supports the supply chain strategy above

Risks and Constraints

A range of risks and constraints were identified during the pilot, of which some were considered relevant to all ICSs:

- Pressure to achieve the Medium-term financial plan reducing focus on investments, leading to delayed impact
- Absence of Total Cost Supply Chain thinking when choosing new products
- Legacy Financial systems that expense inventory as soon as received and do not measure waste and stock savings
- Staffing challenges
- Limited capital investment in facilities and estates
- Pace of IMS roll out
- Absence of career pathway for supply chain professionals
- Low awareness of high impact supply chain improvements can have
- High focus on procurement and price rather than end to end supply chain cost
- Inconsistent reporting structures for supply chain
- Lack of shared vision within ICS

Whilst these constraints are significant, the benefits to be gained from an optimised supply chain are also substantial.

High level Benefit of Optimised Supply Chain

Cost Reduction

Drives down high and unplanned reactive costs through forward event and scenario planning



ICS Priority

Aligns with ICS Priority to ensure services are delivered as efficiently and effectively as possible.

Aligns with ICS priority to collaborate & coordinate the use of collective resources to achieve economies of scale

Procurement Savings

Drives end to end costing across the full life cycle for all clinical product purchases



ICS Priority

Aligns with ICS challenge of extremely volatile pricing against the backdrop of high inflation.

Aligns with ICS priority to collaborate & coordinate the use of collective resources to achieve economies of scale

Waste Reduction

Drives waste reduction and manages supply risks efficiently



ICS Priority

Aligns with ICS challenge of waste and excess inventory reduction.

Aligns with ICS priority to collaborate & coordinate the use of collective resources to achieve economies of scale

Space Savings

Drives better use of hospital real estate through targeted inventory policies and appropriate location planning



ICS Priority

Aligns with ICS priority of maximising resources aimed at improving cradle to grave population health

Aligns with ICS priority to collaborate & coordinate the use of collective resources to achieve economies of scale

Conclusion

The Programme and NHS Supply Chain would like to thank NCL for their willingness to be the subject of this pilot.

As a result of this work, the following conclusions have been reached:

- The path from a reactive ICS supply chain to a mature and optimised ICS supply chain is dependent on the implementation and maturity of 7 critical supply chain processes.
- Successful implementation of these processes requires an ICS team that has a clear collaborative strategy and is trained in supply chain management principals.
- Ongoing supply chain improvements will depend up the creation of and adherence to an undergirding supply chain strategy that is adopted by the ICS as a whole.
- The development of an optimised ICS supply chain will deliver savings and lead to enhanced patient care within the NHS.