FDP and Digitalisation of Clinical Data Sets
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Problem Statement: The Inventory Landscape

There a five challenges impacting Trust's inventory management and supply chain activity.

Five Problems of Inventory

1. **Limited Inventory Management Oversight**

2. **Reactive Procurement Processes**

3. **Missed Opportunities for Regional Collaboration**

4. **Challenges with Contract and Performance Management**

5. **Disconnected Decision-Making from Patient Outcomes**

The cumulative effect of these issues is an inefficient

"Inventory Management Pendulum,"

Inventory Management Oversight

Over Ordering
- × Cost to hold
- × High wastage
- × Drive price increase for other trusts

Reactive Ordering
- × Cancellation of activity
- × Increase cost of alternative products

Demand and Supply Equilibrium
- √ Efficient stock levels
- √ Transparency on demand to suppliers
- √ Leverage price through volume power across systems
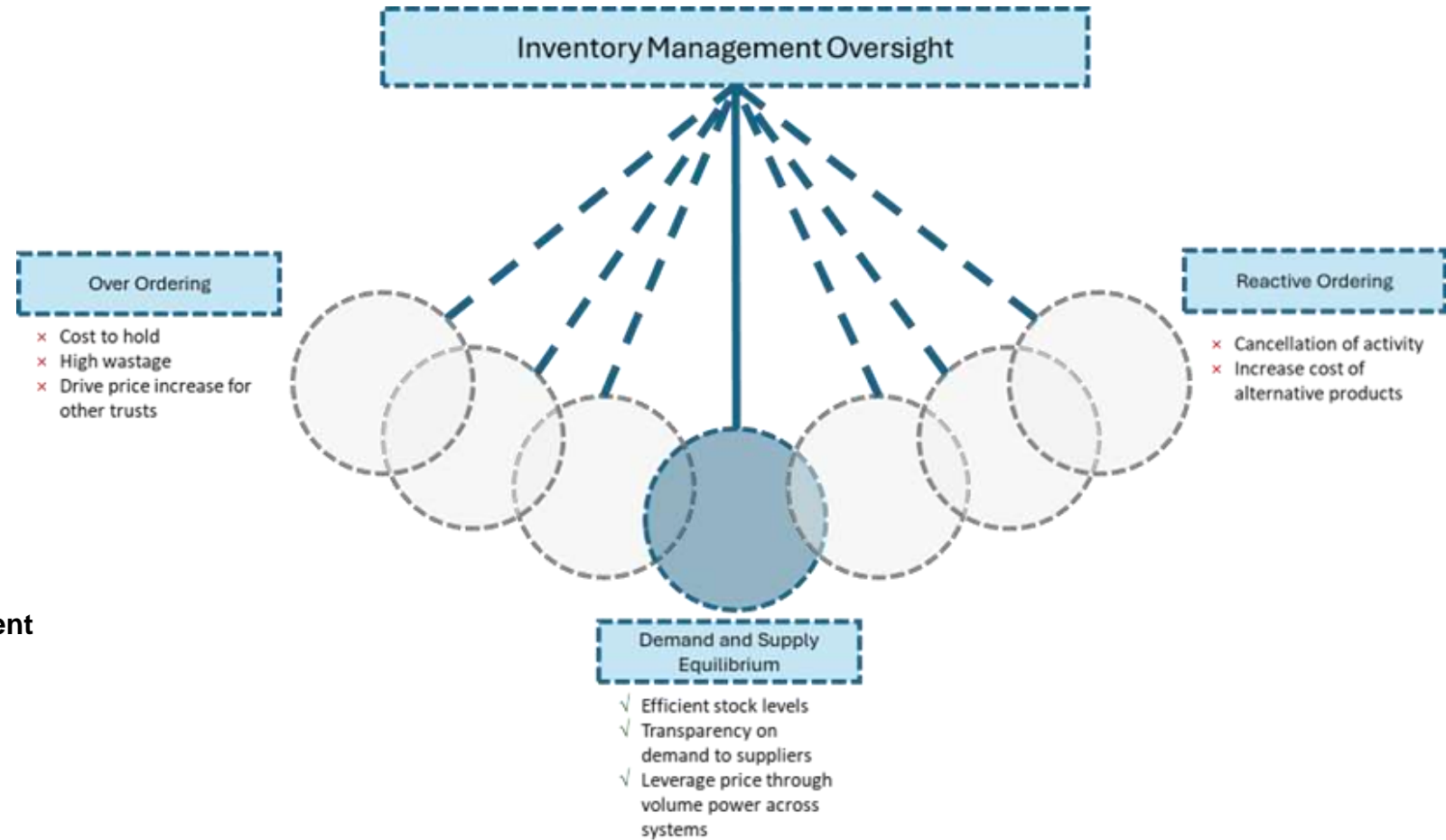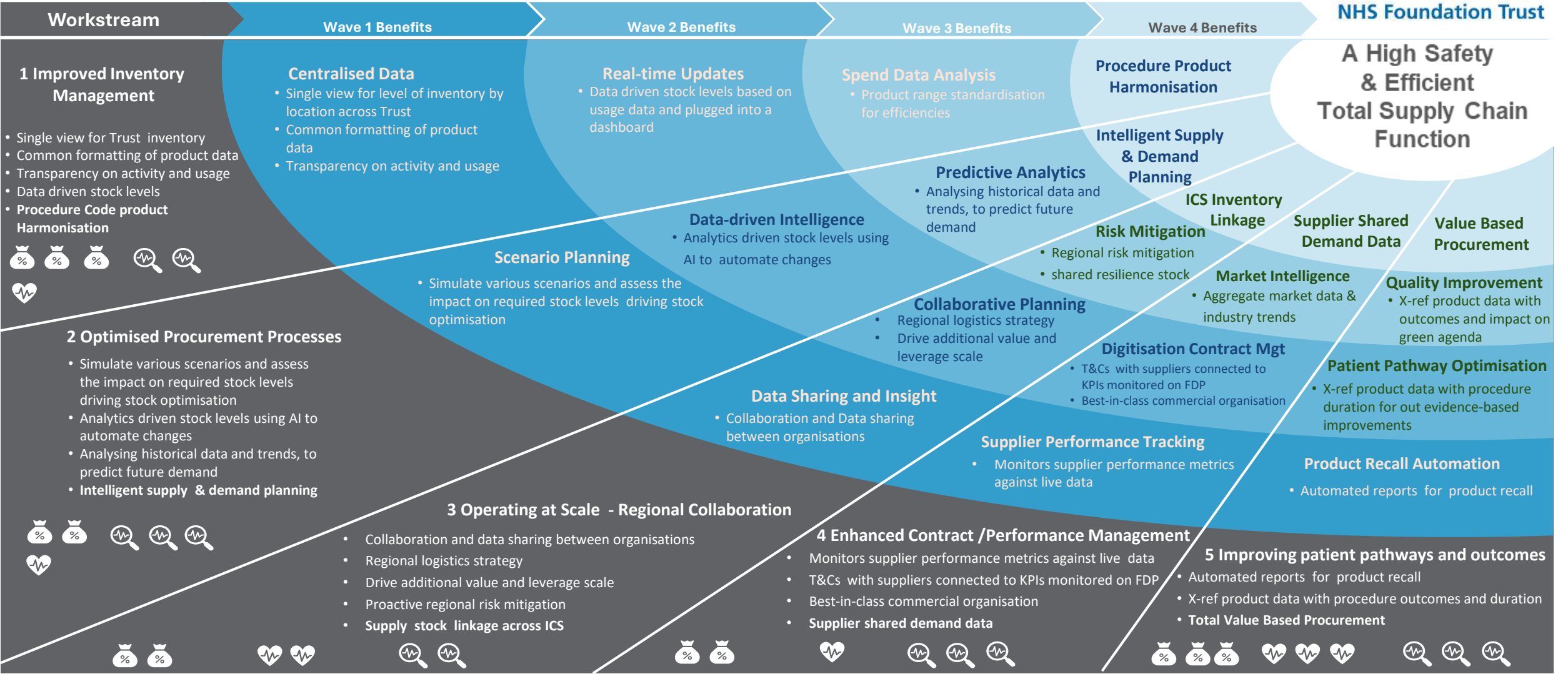
Figure 1: Inventory Pendulum of Cost

Product Vision: Transformation Road Map for A Total Supply Chain (TSC)

Each tier of products builds upon the previous one, propelling advancements across the five workstreams.

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| Workstream | Wave 1 Benefits | Wave 2 Benefits | Wave 3 Benefits | Wave 4 Benefits |

A High Safety & Efficient Total Supply Chain Function

1 Improved Inventory Management

- Single view for Trust inventory
- Common formatting of product data
- Transparency on activity and usage
- Data driven stock levels
- **Procedure Code product Harmonisation**

Centralised Data
- Single view for level of inventory by location across Trust
- Common formatting of product data
- Transparency on activity and usage

Real-time Updates
- Data driven stock levels based on usage data and plugged into a dashboard

Spend Data Analysis
- Product range standardisation for efficiencies

Procedure Product Harmonisation

Intelligent Supply & Demand Planning

Predictive Analytics
- Analysing historical data and trends, to predict future demand

Data-driven Intelligence
- Analytics driven stock levels using AI to automate changes

Scenario Planning
- Simulate various scenarios and assess the impact on required stock levels driving stock optimisation

ICS Inventory Linkage

Risk Mitigation
- Regional risk mitigation
- shared resilience stock

Supplier Shared Demand Data

Value Based Procurement

Market Intelligence
- Aggregate market data & industry trends

Quality Improvement
- X-ref product data with outcomes and impact on green agenda

Collaborative Planning
- Regional logistics strategy
- Drive additional value and leverage scale

Digitisation Contract Mgt
- T&Cs with suppliers connected to KPIs monitored on FDP
- Best-in-class commercial organisation

Patient Pathway Optimisation
- X-ref product data with procedure duration for out evidence-based improvements

Data Sharing and Insight
- Collaboration and Data sharing between organisations

Supplier Performance Tracking
- Monitors supplier performance metrics against live data

Product Recall Automation
- Automated reports for product recall

2 Optimised Procurement Processes

- Simulate various scenarios and assess the impact on required stock levels driving stock optimisation
- Analytics driven stock levels using AI to automate changes
- Analysing historical data and trends, to predict future demand
- **Intelligent supply & demand planning**

3 Operating at Scale - Regional Collaboration

- Collaboration and data sharing between organisations
- Regional logistics strategy
- Drive additional value and leverage scale
- Proactive regional risk mitigation
- **Supply stock linkage across ICS**

4 Enhanced Contract /Performance Management

- Monitors supplier performance metrics against live data
- T&Cs with suppliers connected to KPIs monitored on FDP
- Best-in-class commercial organisation
- **Supplier shared demand data**

5 Improving patient pathways and outcomes

- Automated reports for product recall
- X-ref product data with procedure outcomes and duration
- **Total Value Based Procurement**

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Key
- 🛍️ Cost Improvement
- 🔍 Insight and Efficiency
- 💓 Patient Improvement

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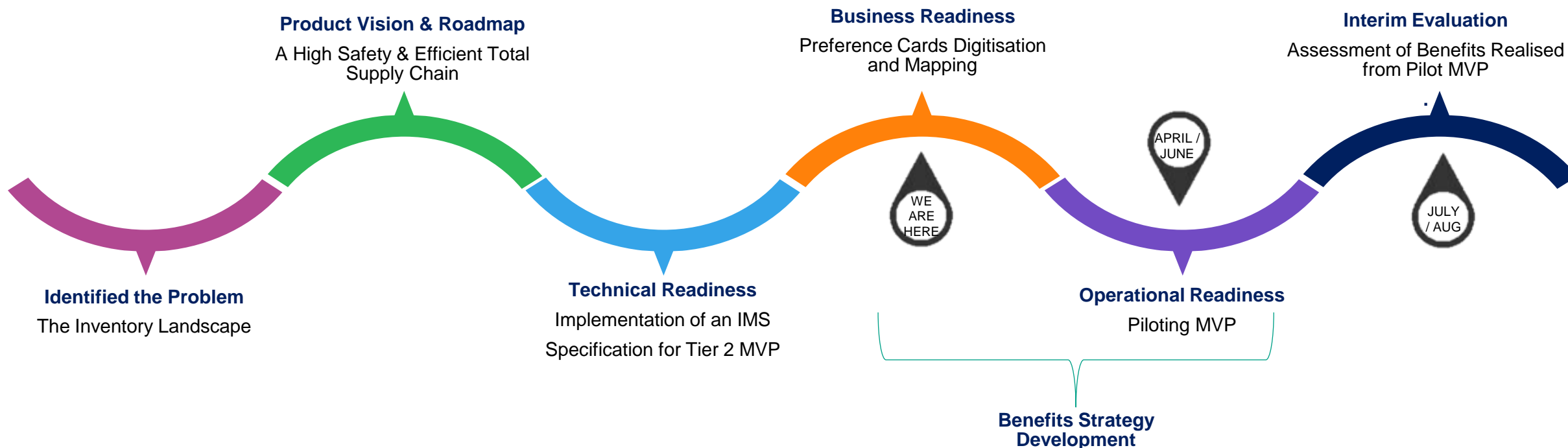= Tier 1 IMS   = Tier 2 Trust Product   = Tier 2.5 / 3 National Product

A Total Supply Chain (TSC) Tool: Journey to Date

Northumbria Healthcare Foundation Trust has advanced from defining the problem to preparing for the pilot phase of a solution. Prior to initiating the live pilot, it is essential to establish a benefits strategy and methodology.

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Visual Journey: FDP TSC Tool

Product Vision & Roadmap
A High Safety & Efficient Total Supply Chain

Business Readiness
Preference Cards Digitisation and Mapping

Interim Evaluation
Assessment of Benefits Realised from Pilot MVP

APRIL / JUNE

WE ARE HERE

JULY / AUG

Identified the Problem
The Inventory Landscape

Technical Readiness
Implementation of an IMS Specification for Tier 2 MVP

Operational Readiness
Piloting MVP

Benefits Strategy Development

Benefits Realisation Strategy - Principles for Assessing Benefits

To achieve a precise and realistic assessment of the potential effects of the MVP, the benefits strategy is founded on five key principles.

Focus on Benefit Hypothesis
- As an incubator product, the benefits strategy prioritises validating benefit hypotheses rather than merely forecasting benefits.

Data-Driven Insights
- All hypotheses are based on data and inventory insights, ensuring that decisions are informed by empirical evidence.

Forecasting Post-Validation
- Forecasting will only be undertaken after a benefit has been validated during the MVP stage. This ensures accuracy and reliability.

No Double Counting
- There will be no double counting of benefits realised between different product tiers. Each hypothesised benefit is new and distinct from previously achieved benefits from any achieved from the previous tier.
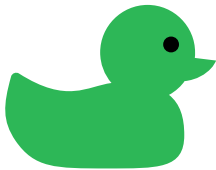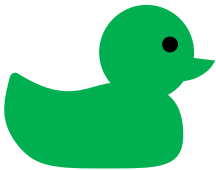
Multiplier Effect
- As you progress through the different tiers of the DaIL tool, there is an additional positive incremental improvement against all previous identified benefits.

Critical Path for the TSC Tool Delivery

To enable the FDP Incubator product, we need to get all our ducks in a row
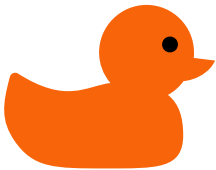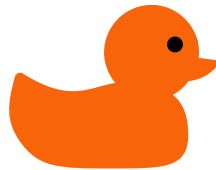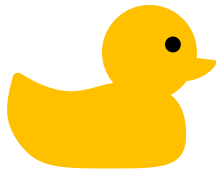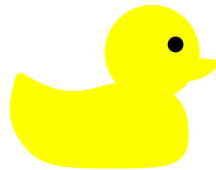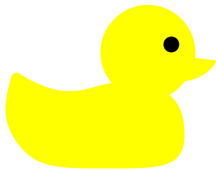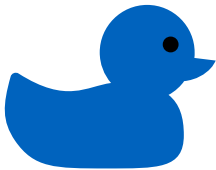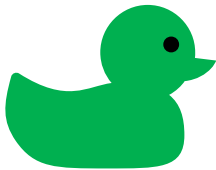
Leadership	Funding	Vision	Delivery Partners	Clarity on the ROI	Data Definitions	Procedure Codes	Preference Cards	Adoption and Change
Executive Clinical Finance Procurement Data & Analytics	IMS Tier 2 Development Or Internal Business Case	A High Safety & Efficient Total Supply Chain Function	NHSE NHS Supply Chain GS1 UK EY IMS	Requires a lot of commitment to achieve business and technical readiness	Trust led approach versus creating national standards	Local codes mapped to procedure codes	Electronic Preference cards mapped to catalogue references.	Embed Change and develop skills required for procurement and inventory teams