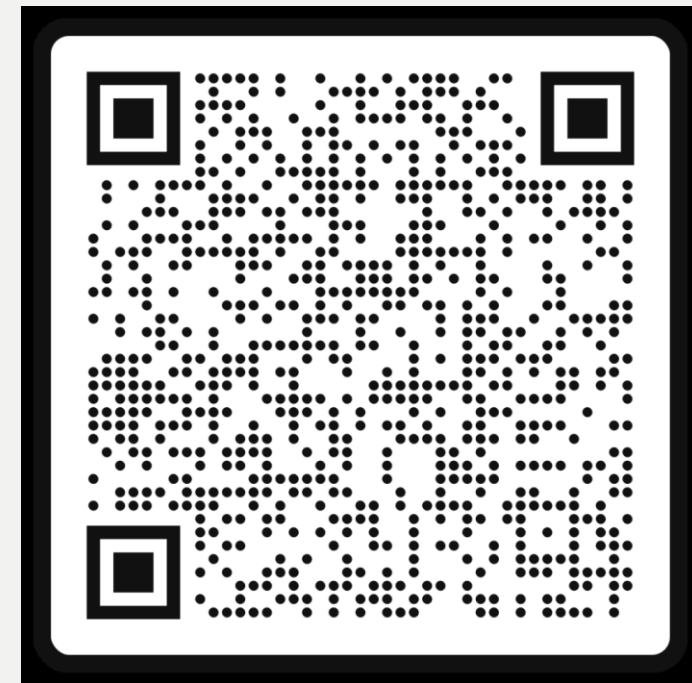# Welcome to the NHS Hospitals Interoperability Summit!
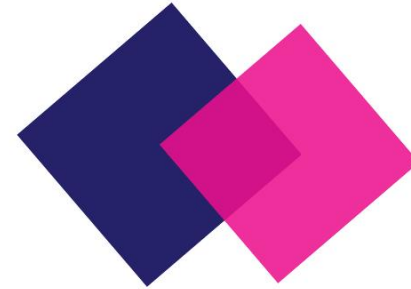
26th February 2025
15Hatfields Conference Centre,
Chadwick Court, London, SE1 8DJ

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CONVENZIS TRAINING

Register your Interest

Convenzis

NHS Hospitals Interoperability Summit

Bridging Trusts for Seamless Healthcare

Convenzis

Main Sponsor

ABBYY

Karen Gorman
Head of Healthcare
SS&C Blue Prism

ABBYY

Revolutionising NHS Document Processing: How Intelligent Automation Unlocks Efficiency and Reduces Admin Burden.

Amir Behfar

UK & Ireland Sales Director

26/02/2025

What is IDP?

"IDP software solutions blend the power of AI technologies to efficiently process all types of documents and feed the output into downstream applications." – **Everest Group, 2022**

📌 **In Simple Terms:**

• IDP automates the **extraction, classification, and validation** of data from documents.

• Uses **AI, ML, and NLP** to improve accuracy and efficiency over time.

• Reduces manual processing and enables seamless data flow into NHS systems.

ABBYY

We are ABBYY

✅ Automate **document-heavy processes** for improved efficiency and accuracy.

✅ 35+ years of AI & automation expertise

✅ Market leader in IDP

✅ Thousands of organisations, including NHS

✅ Works seamlessly with NHS systems

Our Mission: To enable organisations to turn documents into intelligent, actionable data that fuels digital transformation.

ABBYY

ABBYY is a **recognized market leader**

#1 IDP provider globally

10 Analyst firms name ABBYY a Leader in IDP

6 Analyst firms name ABBYY a Leader in Process Mining – top challenger

Gartner FORRESTER® IDC

Everest Group® NelsonHall TRANSFORM THROUGH INSIGHT

The New York Times iSG®

Forbes The Washington Post

FORTUNE

ABBYY

World's leading companies **trust ABBYY**

10,000+
Customers worldwide

Fortune 500
companies are ABBYY customers

ABBYY

Why IDP Matters for the NHS?

Challenges in NHS Document Processing:

- High volume of unstructured documents (invoices, referrals, medical forms).
- Manual data entry leads to **delays, errors, and staff burnout**.
- Need for **seamless interoperability** between different hospital IT systems.

💡 **How ABBYY Helps:**

✅ Automates document processing across NHS workflows.

✅ Reduces admin burden so staff can focus on **patient care**.

✅ Helps with seamless **data exchange** across multiple systems

ABBYY

Manchester University NHS Foundation Trust
The Challenge

NHS 75
Manchester University
NHS Foundation Trust

- Processes **300,000 invoices/year** from **6,000 suppliers**.

- Previous IDP solution caused **manual effort due to complexity**.

- Needed a solution that:
  - ✅ Accurately extracts invoice data.

  - ✅ Passes reliable data to RPA for ERP integration.

  - ✅ Reduces invoice validation and training time.

ABBYY

How ABBYY Helped – The Solution

- Extracts invoice data **with high accuracy** even from complex documents.

- **Seamless integration** with RPA and ERP.

- Enables **low-code** automation using pre-built extraction models.

- **Machine learning continuously improves accuracy** and reduces validation time.

ABBYY

VALUE delivered

🚀 **Solution rolled out in weeks, not months.**

⏳ **Reduced processing time, payment risks, and reconciliations.**

🧑‍⚕️ **Freed up staff time.**

🤖 **Continuous Machine learning.**

ABBYY

The Future of IDP in the NHS

Expanding IDP beyond finance & procurement:

- **Patient record management** (faster access to critical data)

- **Referral processing** (reducing bottlenecks in patient care)

- **Eye Voucher document** (processing handwritten forms)

ABBYY

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Register your Interest

Digital Blueprint for Cloud Infrastructure

Simplifying the deployment, management and transformation of digital **communication** in **healthcare**

Paul Walsh
Head of Technical Authority,
Norfolk Community Health and Care Trust

Ben Reynish
Head of Sales, Qolcom
a Bechtle Group Company

Accessing Patient Data

Finding Medical Assets

Healthy Spaces (Building & Room Health)

Visibility and Security of Medical Devices

About us

- NCH&C provides community-based NHS health & care at more than 70 different service locations across Norfolk, serving a population of over 900,000 people

- Over 3000 + members of staff work at our trust

- Over 80% of our staff are healthcare professionals such as nurses, doctors, dentists and AHPs

- NCH&C was the first standalone NHS Community Trust in the UK to achieve an 'Outstanding' rating from the Care Quality Commission (CQC)

- Partnership with Qolcom

1,516 patients seen in their own homes

664 patients seen in clinics

1,670 patients in contact with Community Nursing and Therapy Teams

179 patients seen in physiotherapy clinics

586 phonecalls to patients made by clinical staff

2,315 patients face to face with clinical staff

1,229 referrals made to our services

431 hours spent by clinical staff travelling to see patients

456 patients with wounds cared for

200 hours spent caring for leg ulcers

311 pressure ulcer patients treated

19 end of life patients cared for

176 ill and vulnerable children treated

44 patients in 'virtual wards', where they stay in their own homes supported

235 total beds across our inpatient units, including 166 community beds and 69 specialist beds

54 patients in Residential or Care Homes seen

About us – Norfolk and Waveney ICS

Norfolk & Waveney Integrated Care System

NHS Norfolk and Waveney Integrated Care Board

5 place boards

105 GP practices

17 primary care networks

572 CQC registered care providers

Cambridgeshire Community Services NHS Trust

The Queen Elizabeth Hospital King's Lynn NHS Foundation Trust

Integrated Care 24

Norfolk Community Health and Care NHS Trust

Norfolk County Council

James Paget University Hospitals NHS Foundation Trust

Norfolk and Norwich University Hospitals NHS Foundation Trust

East of England Ambulance Service NHS Trust

Norfolk and Suffolk NHS Foundation Trust

190 community pharmacies

5 GP provider groups

8 district councils

East Coast Community Healthcare

Suffolk County Council

1.1 million people live in Norfolk and Waveney

2 health and wellbeing boards

At least 17 Housing Associations

Norfolk and Waveney Integrated Care Partnership

8 local health and wellbeing partnerships

12,000 formal and informal charitable organisations

Joint Vision

Best ICS Model (Blueprint)

Running services together, collaboratively in our region

Effective, Efficient and Secure

Best Practice

"Enabling a pioneering digital blueprint which provides a common modern infrastructure for seamless connectivity for customers across Norfolk and Waveney…"

Joint Vision

Blueprint

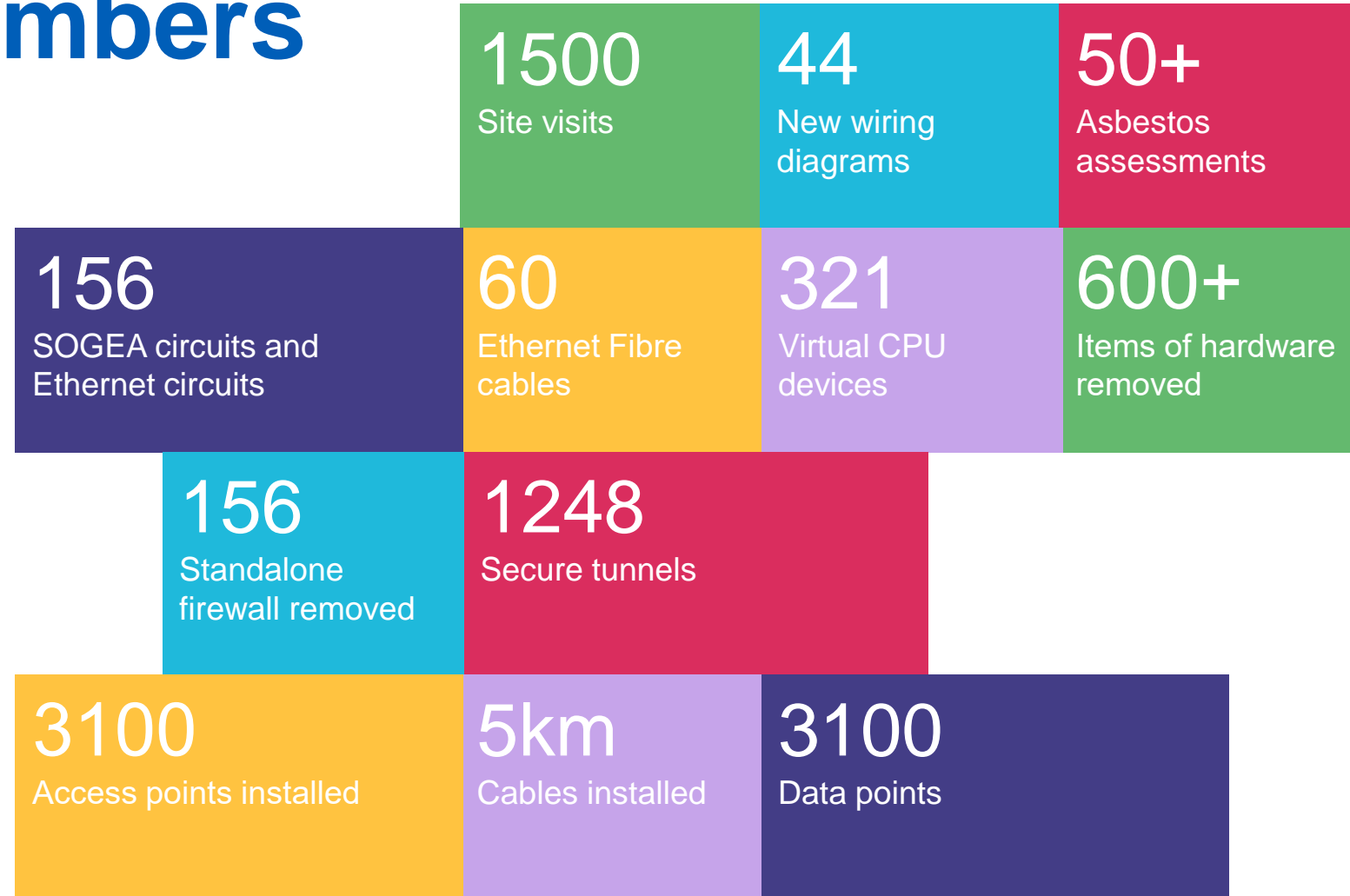| SD-WAN	Single Authentication	Wi-Fi	Firewalls	HSCN
Flexible application driven network for modern services	Supports simpler user experience	Cloud-integrated Wi-Fi for anyone	SD-WAN integrated firewalls for Zero Trust Architecture (ZTA)	Access supplied through highly-resilient geographically dispersed hub sites

By the numbers

1500 Site visits	**44** New wiring diagrams	**50+** Asbestos assessments
156 SOGEA circuits and Ethernet circuits	**60** Ethernet Fibre cables	**321** Virtual CPU devices	**600+** Items of hardware removed

156 Standalone firewall removed

1248 Secure tunnels

3100 Access points installed

5km Cables installed

3100 Data points

Operational & Clinical benefits

Improved access to patient data supporting digital transformation

Adoption of M365

Image processing, use of apps and mobile devices through Wi-Fi

EPR Systems access

Patient Benefits
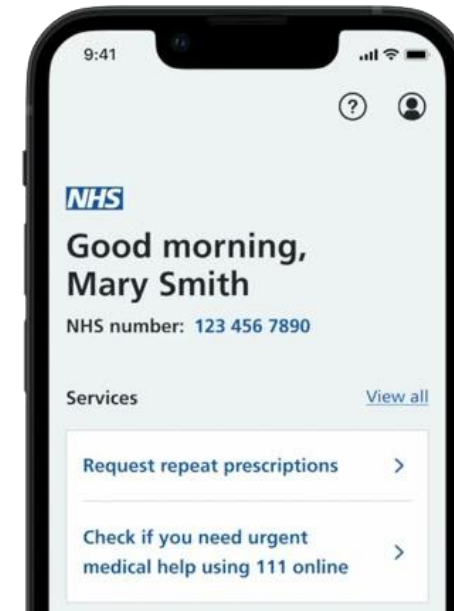
Operational & Clinical benefits

Supports the Primary Care Access Recovery Programme and adoption of digital tools to deliver the Modern General Practice model

SD WAN provides a reliable network solution for efficient access to patient data across all primary care sites in Norfolk and Waveney

Improved network performance and resilience the SD WAN solution has led to better productivity in practices - "I didn't realise EMIS could be so fast"

Improved security by replacing out of date firewalls with a new cloud based virtual firewall solution

SD-WAN offers a unified network solution for fixed and Wi-Fi connectivity, enabling a single domain and single sign-on across Norfolk and Waveney primary care.
Some clinicians currently have 8+ different logins due to working across multiple sites

The Wi-Fi solution is fully integrated into the SD-WAN for complete site coverage.

- Mobile access for staff and patients, including phone coverage in areas with weak 4G signals.

- Govroam allows staff from other NHS and government organizations to access IT and patient care systems seamlessly.

Thank you

Q&A

Improving Patient Care

Introduction

Chris Uren

Public Sector Sales Director
Telefónica Tech UK&I

A BETTER WORLD

Solving our customers' most *complex challenges*

We believe in building a better world through secure digital enablement, focusing on solving our customers' most complex challenges with our comprehensive end-to-end solutions.

Our mission is to guide them confidently through their digital transformation, ensuring their success in an evolving digital world.

Through Data & AI, Cyber Security, Cloud, Business Applications, and digital workplace solutions, we create a positive impact for our customers and the community.

CLOUD
Leveraging the latest technologies, we provide digital infrastructure that empowers and supports our customers on their cloud journey.

DATA & AI
Visualising and harnessing the power of data and AI, we enable data-driven decisions and transformation.

BUSINESS APPLICATIONS
Harnessing the power of the Microsoft ecosystem, we solve complex business problems and provide revolutionary digital transformation.

CYBER SECURITY
Driving structured cyber security resilience in a complex digital landscape, we provide a secure and cost-effective posture.

DIGITAL WORKPLACE
Enabling hybrid working on secure and sustainable devices, we embrace automation and provide outstanding user experience.

Telefónica Tech

Data & AI

Data-driven digital transformation

Helping organisations visualise and harness the power of data

Whether it means designing an analytics or data governance strategy, building and evolving a data and AI platform, or managing a data and analytics platform for our customers, we are a data & AI partner that organisations can rely on to keep them effortlessly at the cutting edge, no matter how fast technology evolves.

Data-first culture is built on more than just technology. People, guardianship, capabilities and accessibility are core to successful data programmes. We offer transformational consultancy to drive adoption and fuel your business with data.

Cloud

Cyber Security

Data & AI

Telefónica Tech

Digital Workplace

Business Applications

Improving Patient Care

Thames Valley & Surrey Secure Data Environment

Kerrie Woods
TVS SDE Programme Director

NHS
Oxford University Hospitals
NHS Foundation Trust

Telefónica Tech

Context

NHS

Department of Health & Social Care

Policy paper
Data saves lives: reshaping health and social care with data

Updated 15 June 2022

In secure data environments, access to data is granted […] in a controlled and recorded manner.

We will be mandating the use of secure data environments for NHS data

Research Secure Data Environment NETWORK

NHS

Secure Data Environments:

|		
E	England	POPULATION **57m**
EE	East of England	POPULATION **6.6m**
EM	East Midlands	POPULATION **5.1m**
KMS	Kent, Medway & Sussex	POPULATION **3.8m**
L	London	POPULATION **10.5m**
NENC	North East and North Cumbria	POPULATION **3.2m**
NW	North West	POPULATION **7.3m**
SW	South West	POPULATION **5.2m**
TVS	Thames Valley & Surrey	POPULATION **3.9m**
W	Wessex	POPULATION **2.8m**
WM	West Midlands	POPULATION **6.2m**
YH	Yorkshire & Humber	POPULATION **5.9m**

TVS

- Buckinghamshire, Oxfordshire, and Berkshire West ICS

- Frimley Healthcare ICS

- Surrey Heartlands ICS

- Milton Keynes University Hospital

- Great Western Hospital

- South Central Ambulance Service

- South East Coast Ambulance Service
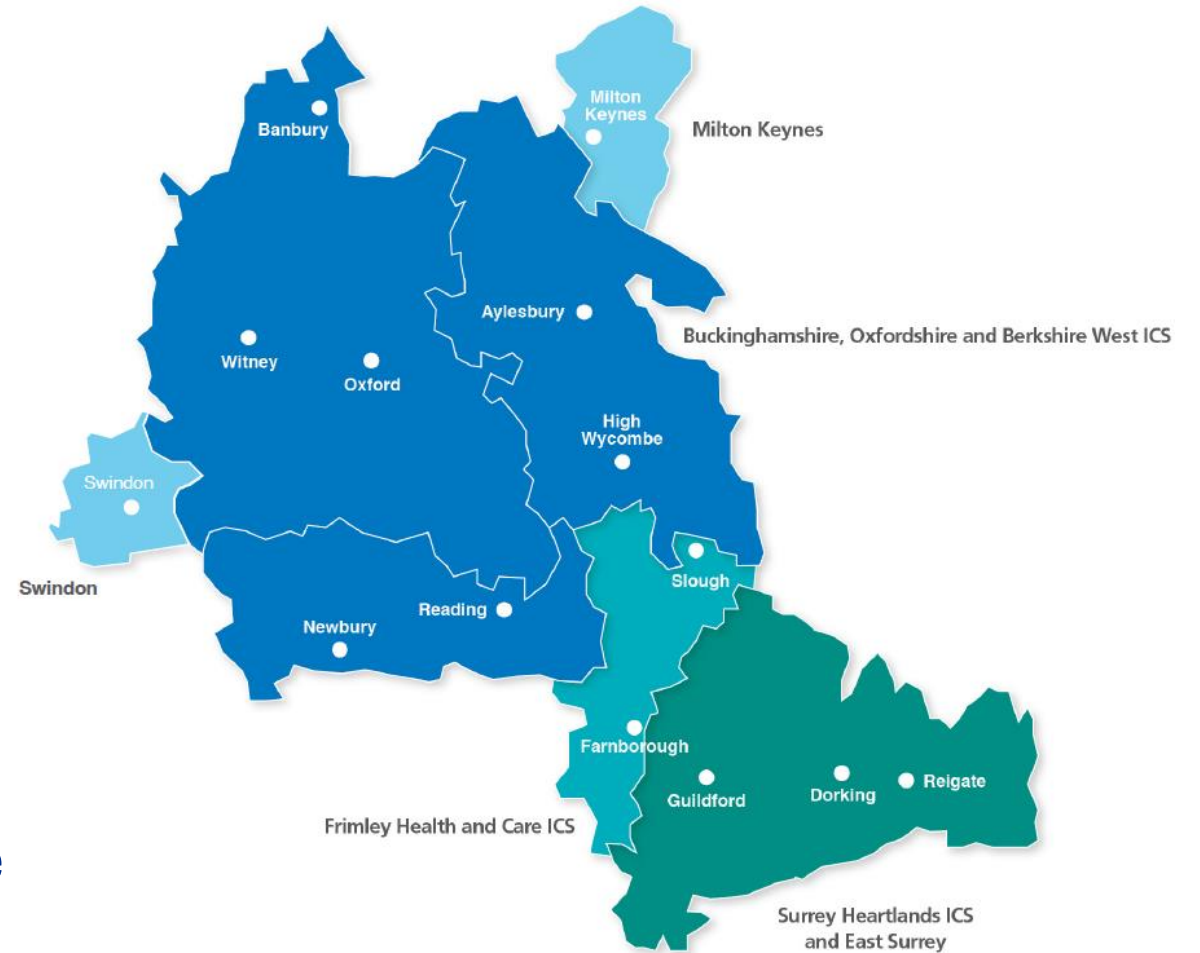
Achievements and enablers

- Obtained
    - legal approval for transfer of raw data (Section 251, HRA CAG)
    - ethical approval for data access process (HRA-affiliated REC)

- Agreed (with NHS partners)
    - joint controllership
    - value assessment framework, 'value return'

- Established
    - services and access review committee
    - community of practice (PPPIE)
- Built tools to support
    - metadata discovery
    - automated access request process with built-in explorer function
    - data delivery and reporting
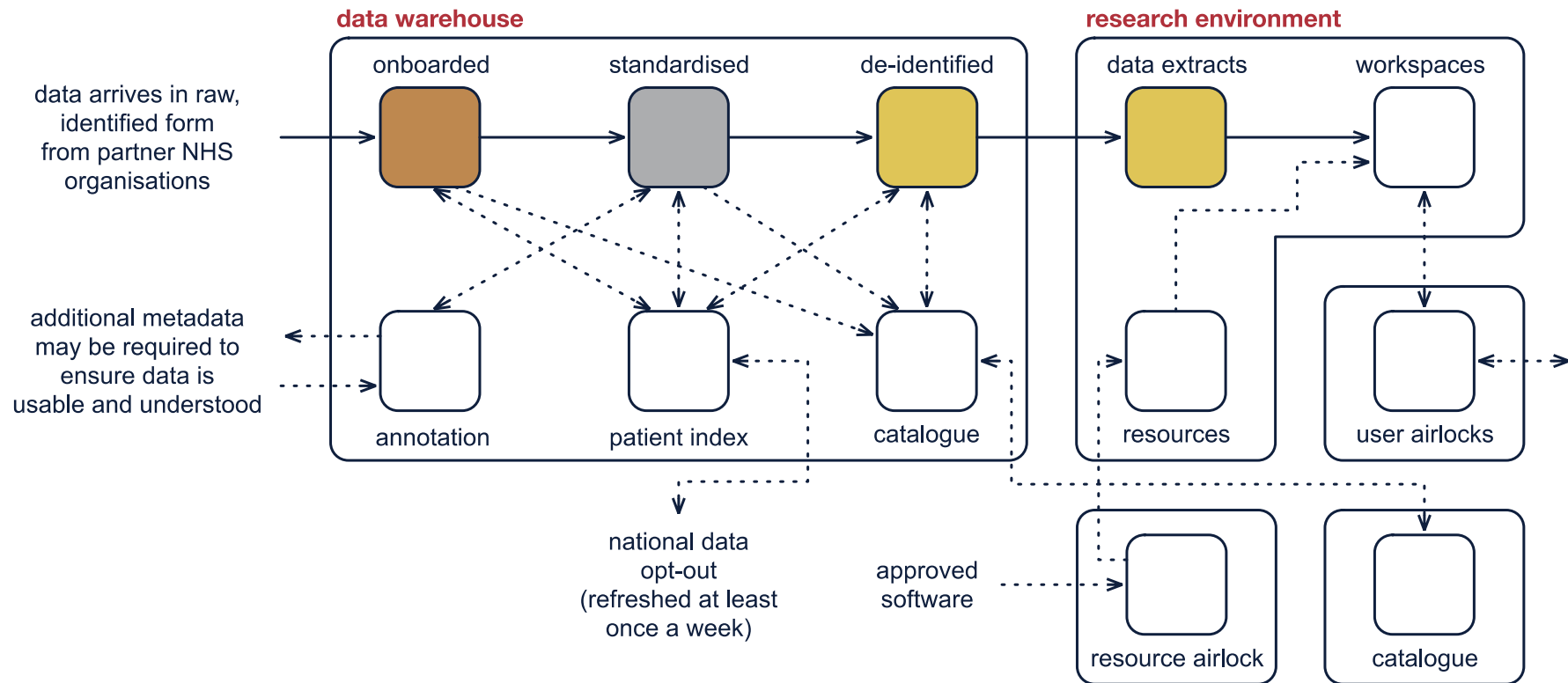
Gold

- Gold A
    - De-identified, partial copies of original tables
    - Additional columns with extracted features
- Gold B
    - Unified tables, merging data from different providers
    - Reflecting clinical data standards
- Gold C
    - Disease-specific data marts with additional, derived data points
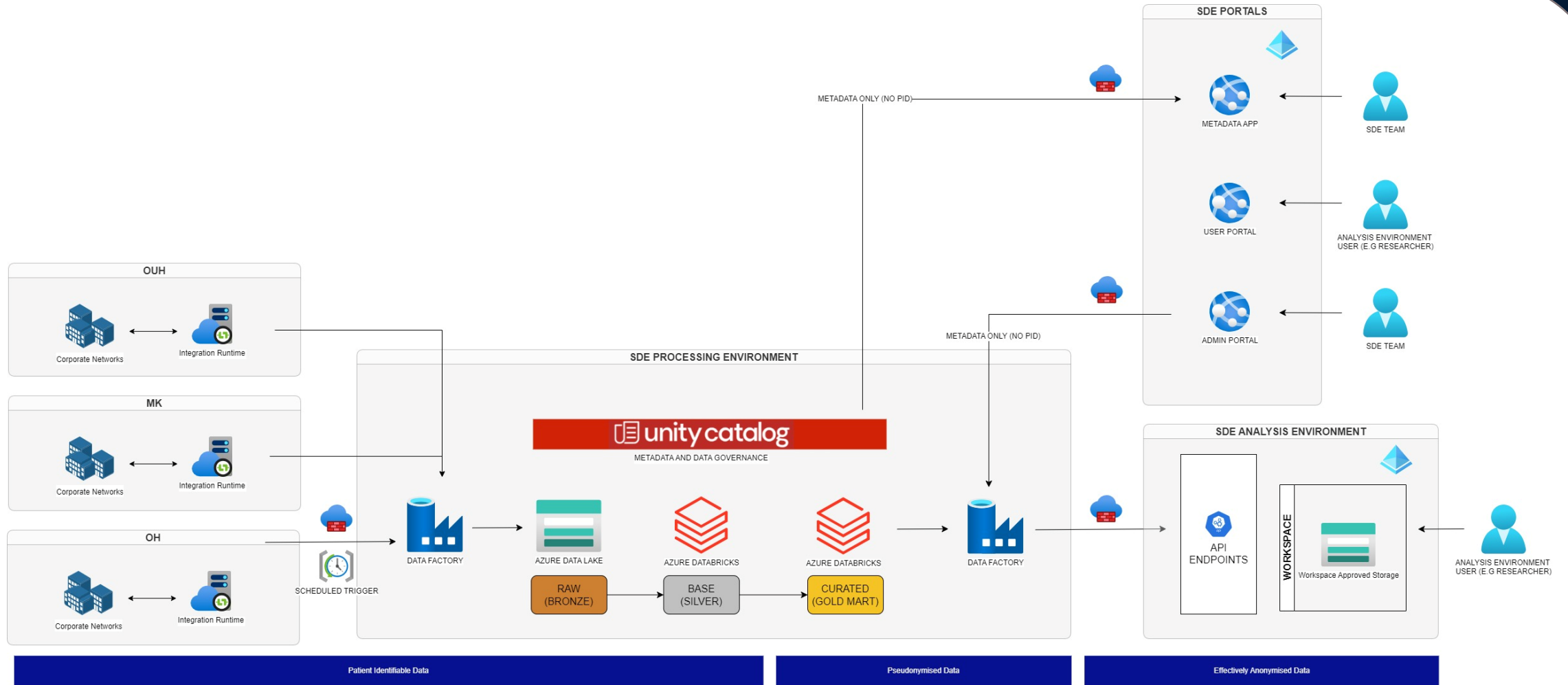   - Reflecting research data standards

The Technology

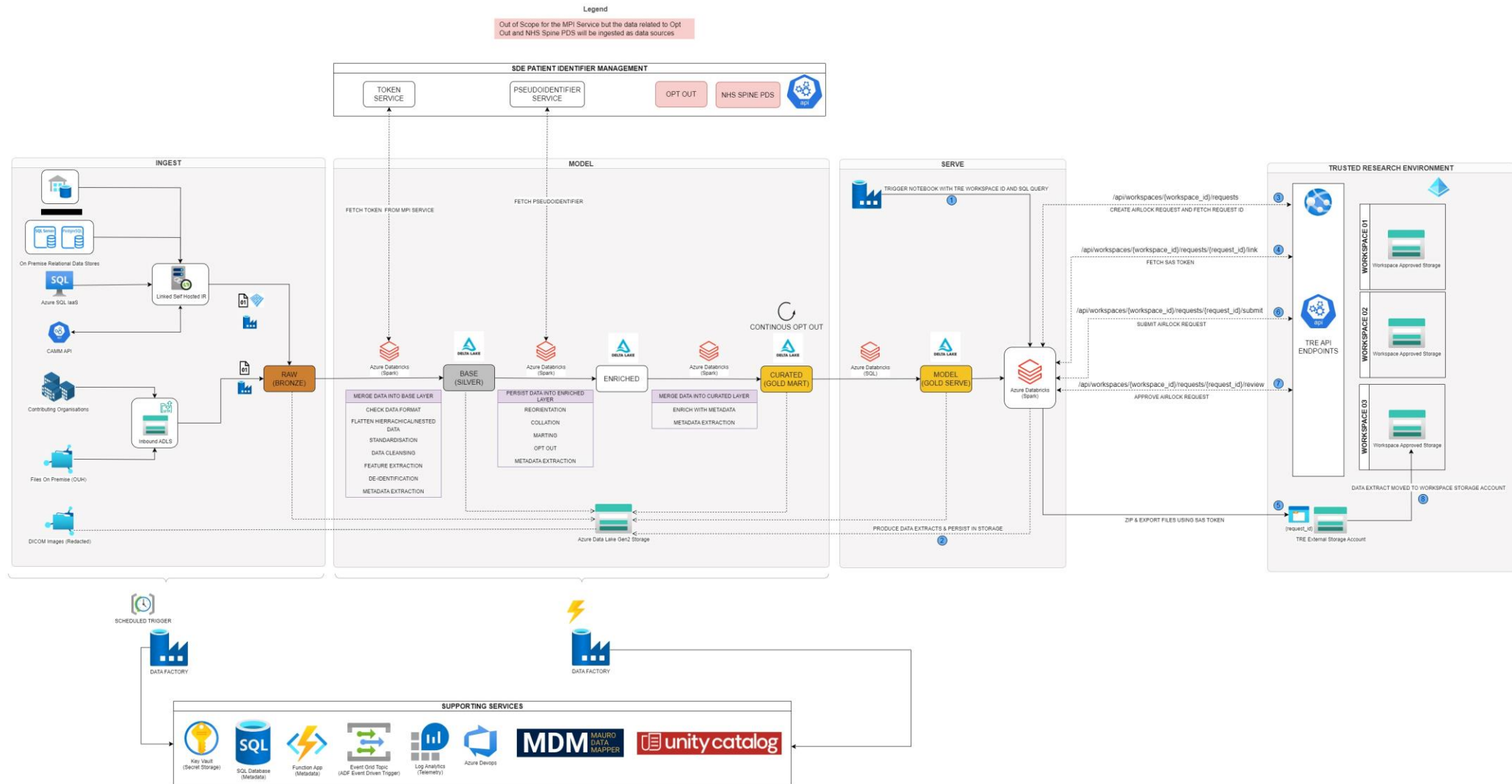# Thames Valley & Surrey Secure Data Environment

George Marlow

Client Delivery Lead
Telefónica Tech UK&I

Telefónica Tech

The Technology Behind TVS SDE

Thames Valley & Surrey SDE

What is Next?

Kerrie Woods & George Marlow

Next Steps

Summary

George Marlow

Our Key Healthcare Offerings
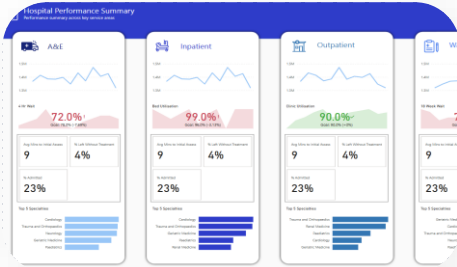
NEW
Healthcare Accelerator

Our Healthcare Accelerator service, based on the OMOP data model, for quick implementation of analytical dashboards addressing NHS challenges. Example: A&E data collaboration with NHS trusts.
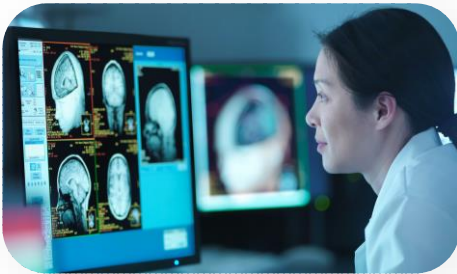
SDE / TRE Framework Support
Using Government Funding

During economic uncertainty, the NHS faces substantial challenges that require innovative solutions and collaboration. Telefónica Tech's extensive experience in developing Secure Data Environments and Trusted Research Environments has established a standard framework, demonstrated with Oxford University Hospitals.

Healthcare Automation in Power Platform
NHSE Funding Supported

NHS Trusts need scalable, intelligent automation to streamline operations, reduce administrative burdens, and enhance patient care. Telefónica Tech's solutions, built on Microsoft's Power Platform, deliver immediate impact with cost-neutral implementation through NHSE funding.

Scan for more information

Telefónica Tech

Telefónica
Tech

www.telefonicatech.uk

Case Study

Ian Taylor
Public Sector Sales Director
8x8

Outdated systems no longer align to NHS long term goals

1	Missed calls, under utilised and overworked staff, missed appointments
2	Siloed teams, technology, data, and reporting
3	Service availability and business continuity challenges
4	Complex vendor and system management

The changing landscape

70%

of IT Executives are exploring GenAI adoption with customer engagement and support as the top business use case

Source: Gartner, Market Trend: What CSPs Look for in a Total Experience
Solution, 2023

Creating operational excellence in NHS communications

Supercharge your digital transformation

Maximise operational efficiency

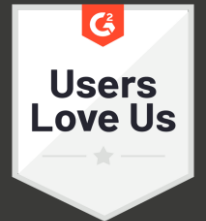Improve patient experiences

Mitigate risk

A safe pair of hands

Gartner Magic Quadrant®

13x

Leader in
UCaaS

10x

Recognised for
CCaaS

1. 2024 Gartner Critical Capabilities for Unified Communications as a Service
   Gartner, Magic Quadrant and associated logos are trademarks of Gartner, Inc.

2. G-G2 and associated logos are trademarks of G2.com, Inc.
   TrustRadius and associated logos are trademarks of TrustRadius, Inc.

How the NHS can leverage future-ready communications

Enhance patient experience

Intuitive interfaces for clinical, admin and front office staff

AI-powered knowledge bases

Seamless EHR and clinical system integrations for personalised patient

Ensure reliability and compliance

Single point of accountability for integrity and security

Call recording and data analytics

DSP toolkit compliance

Ring fenced UK data,

Seamless transformation

Cloud-native, flexible solutions tailored for NHS environments

Safe, phased mitigation strategies with sandbox testing for risk free implementations

Centralised admin for ease of management

Drive productivity and welfare

Real-time presence for collaboration tools to boost efficiency

AI-powered analytics for actionable insights to support training.and resource allocation

Speech and sentiment analysis to improve

Increase cost efficiency

Data-driven reporting and analytics for strategic planning

Consolidated vendor management

Integrated communications channels including Microsoft Teams , SMS and WhatsApp

25

NHS
The Princess Alexandra Hospital
NHS Trust

Hospital Trust accelerates digital journey, enhancing the patient experience

2x

Call volumes handled

1:3

Ratio of hot-desking enabled

"The Trust's corporate goals are built around the 5 'P's – Patients, People, Place, Performance, and Pounds. With 8x8, we've met every one of these."

Jeffrey Wood, Deputy Director of ICT, Princess Alexandra Hospital NHS Trust

8x8® for the NHS

- **Elevate patient and clinician experience** with smart automation and seamless workflows.
- **Maximise operational efficiencies** through AI-driven analytics and cloud-based collaboration.
- **Future-proof NHS communications strategies** with scalable, compliance-ready solutions.
- **Mitigate risk & strengthen data governance** with enterprise-grade security and UK-based hosting.

8x8

Thank you

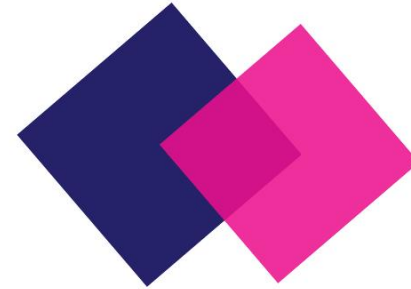For more information please contact
ian.taylor@8x8.com

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Chair Afternoon Reflection

Douglas Hamandishe
Chief Digital Officer/Broadcaster and Presenter
Context Heath and Centric Health Media

CONVENZIS

Keynote Presentation

NHS Hospitals Interoperability Summit

Bridging Trusts for Seamless Healthcare

CONVENZIS

Mark Crannage
Associate Director of BI and
Digital
Cambridgeshire Community
Services NHS Trust

Digital Platform Programme

"…simple, secure and accessible digital channels in place to access advice and guidance, streamlined routes to access support and mechanisms to connect with our services and stay informed"

Mark Crannage

Associate Director for BI and Digital

About Us

LINCOLNSHIRE

NORFOLK

Wisbech

Peterborough

Ely

CAMBRIDGESHIRE

Huntingdon

Cambridge

SUFFOLK

Milton Keynes

Bedfordshire

Ipswich

Luton

HERTFORDSHIRE

ESSEX

The populations we serve are approximately:

Bedfordshire	437,817
Cambridgeshire	644,000
Luton	214,000
Milton Keynes	264,479
Norfolk	883,000
Peterborough	193,000
Suffolk	743,000

Vision

In response to the evolving healthcare landscape and growing patient expectations, we are developing a comprehensive bespoke Digital Platform consisting of Websites and Patient Portal.

- *Websites:* Modern, user-friendly websites will serve as the digital front door for the trust providing information about services, specialties, and the Trust. They will also feature interactive elements to engage visitors and facilitate online interactions.

- *Patient Portal:* The Portal will empower patients with secure access to their health information, appointment scheduling, and communication. It will serve as a centralised platform for patient engagement.

This platform aims to revolutionise patient engagement, streamline administrative processes, and elevate the standard of healthcare delivery. By providing patients with convenient access to healthcare resources and personalised services we will enhance patient satisfaction, improve operational efficiency, and maintain our local competitiveness in the healthcare industry.
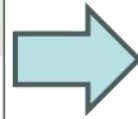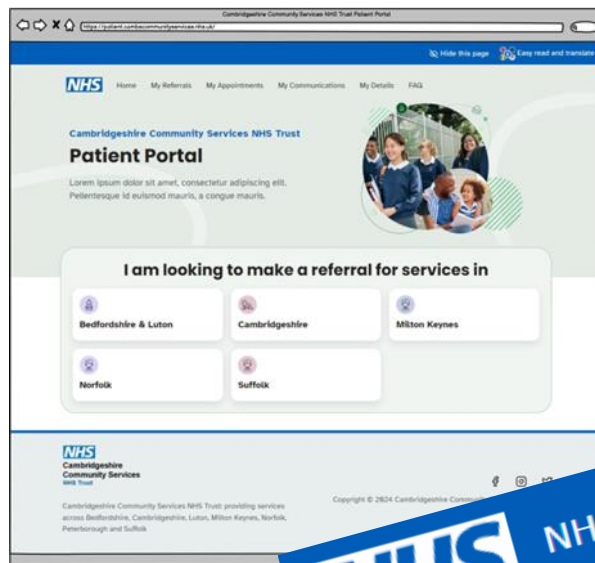
High Level Digital Platform Programme
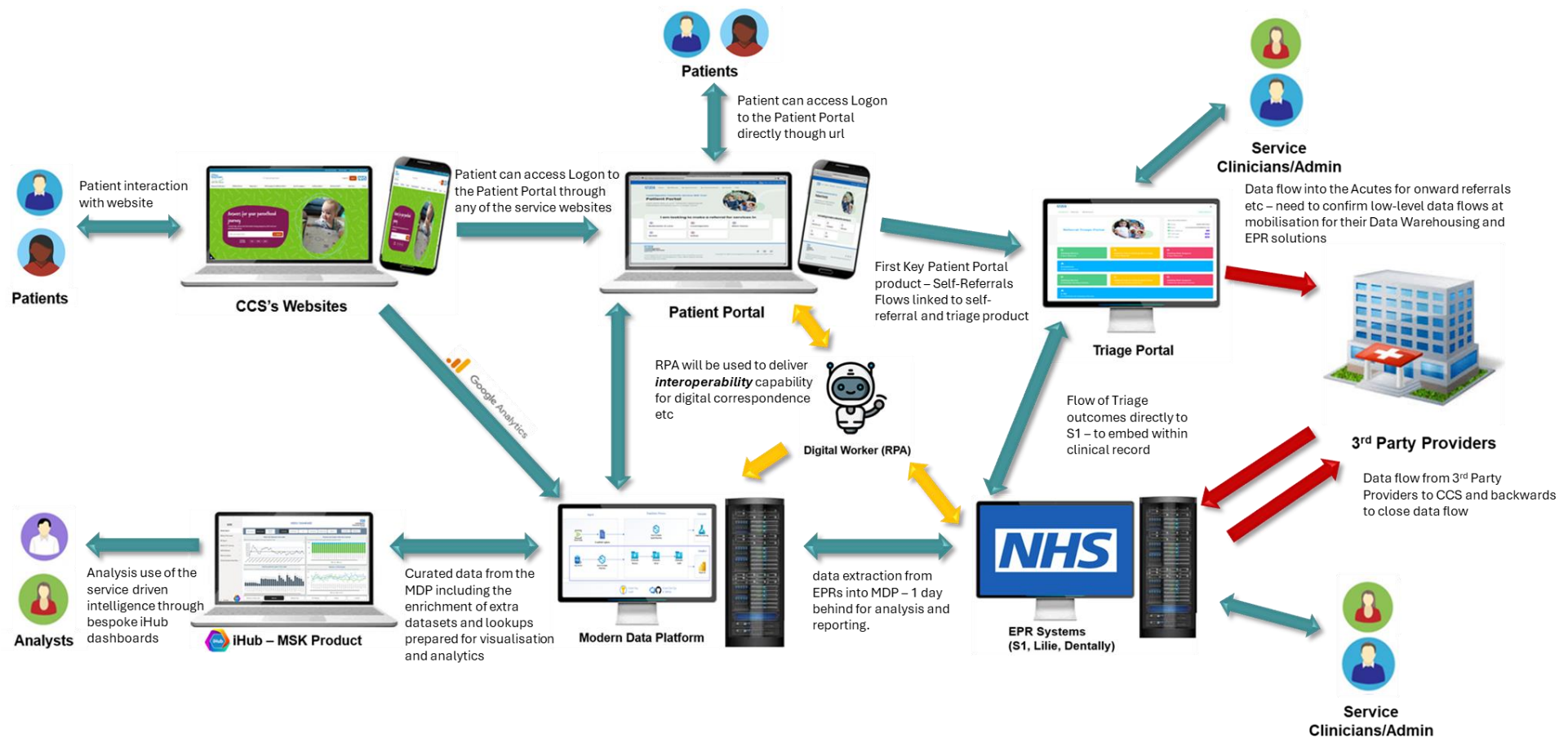
Patient Portal

The development of the key products of a patient portal will lead to improved patient engagement, better patient centric healthcare delivery, streamlined administration processes, and patient satisfaction. NHS APP Login product will be the patient authentication.

Product	Reasoning	Benefit
Secure patient authentication	Secure patient authentication is essential to ensure that only authorised users can access sensitive health information. Methods like multi-factor authentication (MFA) enhance security. Integrating the NHS APP Login product as part of the authentication process.	Protects patient privacy, prevents unauthorised access to personal health data, and ensures compliance with regulatory standards building trust and confidence among patients.
Appointment scheduling	Providing a convenient online scheduling system allows patients to book, reschedule, or cancel appointments at their convenience without needing to call the office.	Increases patient satisfaction by offering flexibility, reduces administrative workload for healthcare staff, and decreases DNA rates through automated reminders and confirmations
Healthcare records access	Allowing patients to access their healthcare records empowers them to take an active role in their health care.	Enhances patient engagement and understanding, facilitates better coordination of care among different services.
Real time care tracking	Offer real-time tracking of a patient's progress through their care journey, reducing confusion and frustration while promoting transparency.	Enables timely interventions and adjustments to health plans, improves management, and provides a comprehensive view of the patient's health status, leading to better outcomes.
Digital correspondence.	Facilitating digital correspondence through the portal streamlines communication between patients and the trust, eliminating the need for phone calls or in-person visits for routine enquiries.	Improves efficiency and response times, enhances patient satisfaction by providing quick and easy access to their healthcare team, and reduces administrative burden on the trust
Account history	Providing access to a detailed account history, details of all activities undertaken and their statuses.	Increases transparency, helps patients manage their healthcare by providing clear and accessible records.
Request for support (referrals)	Enables the trust to deliver Referral Forms for services to patients quickly and in a standardised generic manner.	Speeds up the referral process, ensures timely access to necessary healthcare services, and improves coordination of care by streamlining communication between primary care providers and specialists.
Secure messaging	Enable secure real time communication between patients and healthcare providers for enquiries and follow-ups. Secure messaging systems ensure that all communications between patients and healthcare providers are encrypted and confidential, protecting sensitive information.	Enhances patient trust, ensures compliance with data protection regulations, and provides a safe and efficient platform for discussing health concerns, care plans, and other medical issues.
Educational resources	Offer personalised educational materials and resources to empower patients with relevant health information, including the ability for people to register for support programmes like – pathway to parenting, SLT training, etc.	Promotes health literacy, encourages preventive care, and empowers patients to take proactive steps in managing their health, leading to better long-term health outcomes.

Referral Engine – Referral Form Builder

Referral Engine – Referral Deliverable

Triage Portal

Triage Portal consists of
- SQL DB
- Set of Administration Web Forms to deliver triage functionality.
- Referral Submission rules engine for the referral submission to the appropriate provider in a way they have agreed – i.e frequency and submission method to manage the manual triage process and queues.

Creates a full audit trail of triage decisions.

Traffic Light outcomes from Referral reviewed – these will then sit in separate queues to process.
- Red – Referral Rejection and gets processed and reported on
- Amber – Referral not needed direct to self-care materials but needs to be marked on the clinical system.
- Green – Referral Accepted, and referral sent to Acute provider and added to the clinical record

Green – Accepted Referral
- Referral Submission rules engine to enable referral to be sent at a frequency and through the correct technical pathway as required by the Acute provider.

Referral Status data feed to Patient Portal for Referrer history

Triage Portal

Digital Worker – 'CHUCK'

Meet Chuck!!! CHUCK will assist in delivering backend interoperability processing within the Patient Portal

Appointment Management (Backend Processing)
- *Automated Scheduling and Reminders:* CHUCK will manage appointment booking, rescheduling, and sending reminders across all EPRs, ensuring seamless coordination.

- *Conflict Detection and Resolution:* CHUCK will look to detect appointment conflicts or overlaps across systems and automatically resolve them by suggesting alternative times or notifying staff.

Integration with External Apps (Backend Processing)
- *API-Layer Automation:* CHUCK will manage API calls and automate backend processes, ensuring that data from other apps or systems is integrated in real-time, reducing the need for manual intervention.

Digital Worker – 'CHUCK'

Digital Correspondence (Backend Processing)

- *Automated Correspondence Generation and Routing:* CHUCK will automatically generate and send emails, SMS, or letters based on triggers from the EPRs ensuring timely communication with patients.

- *Unified Archiving and Tracking:* CHUCK will automate the organisation and tracking of all outgoing and incoming correspondence, ensuring that communication logs are updated across all systems for accurate patient records.

Patient Healthcare Journey (Backend Processing)

- *Consolidation of Patient Data:* CHUCK will pull data from the EPRs to create a unified view of the patient's journey, ensuring that all touchpoints, from consultations to treatments, are reflected in one place.

- *Real-Time Journey Visualisation:* CHUCK will provide real-time updates to visualise the entire healthcare journey of the patient, helping healthcare professionals understand the progress and manage patient outcomes more effectively.

High Level Project Timeline

ANY QUESTIONS

CONVENZIS

Keynote Presentation

NHS Hospitals Interoperability Summit

Bridging Trusts for Seamless Healthcare

CONVENZIS

Andrew Raynes
CIO and SIRO
Royal Papworth Hospital NHS
Foundation Trust

Royal Papworth Hospital
NHS Foundation Trust

CIO (Board executive director)
BCS Fellow FedIP Leading Practitioner
CIO UK 100 2022, 23, 24
Global CIO 2023, 2024
Marlow Business School, Global CIO100 2024

- Major London acute
- Local authority
- HMP
- 25+ years NHS and private experience

Royal Papworth Hospital today

'Bringing tomorrow's treatments to today's patients'

UK's leading heart and lung hospital, treating more than 50,000 patients each year.

UK's first successful heart transplant in 1979, and world's first heart-lung and liver transplant in 1986

Most heart and lung transplants of any UK centre and a record five transplants in 36 hours

98% of our patients said they would recommend us to their friends and family

First NHS Trust in England – Robotic thoracic surgery 2023

CQC rated outstanding 2019

CareQuality Commission
Outstanding

Our Hospital and
Heart and Lung Research Institute (HLRI)

https://www.bbc.co.uk/news/av/health-63747798

NHS

Royal Papworth Hospital
NHS Foundation Trust

Collaboration

The Digital Transformation Funnel effect
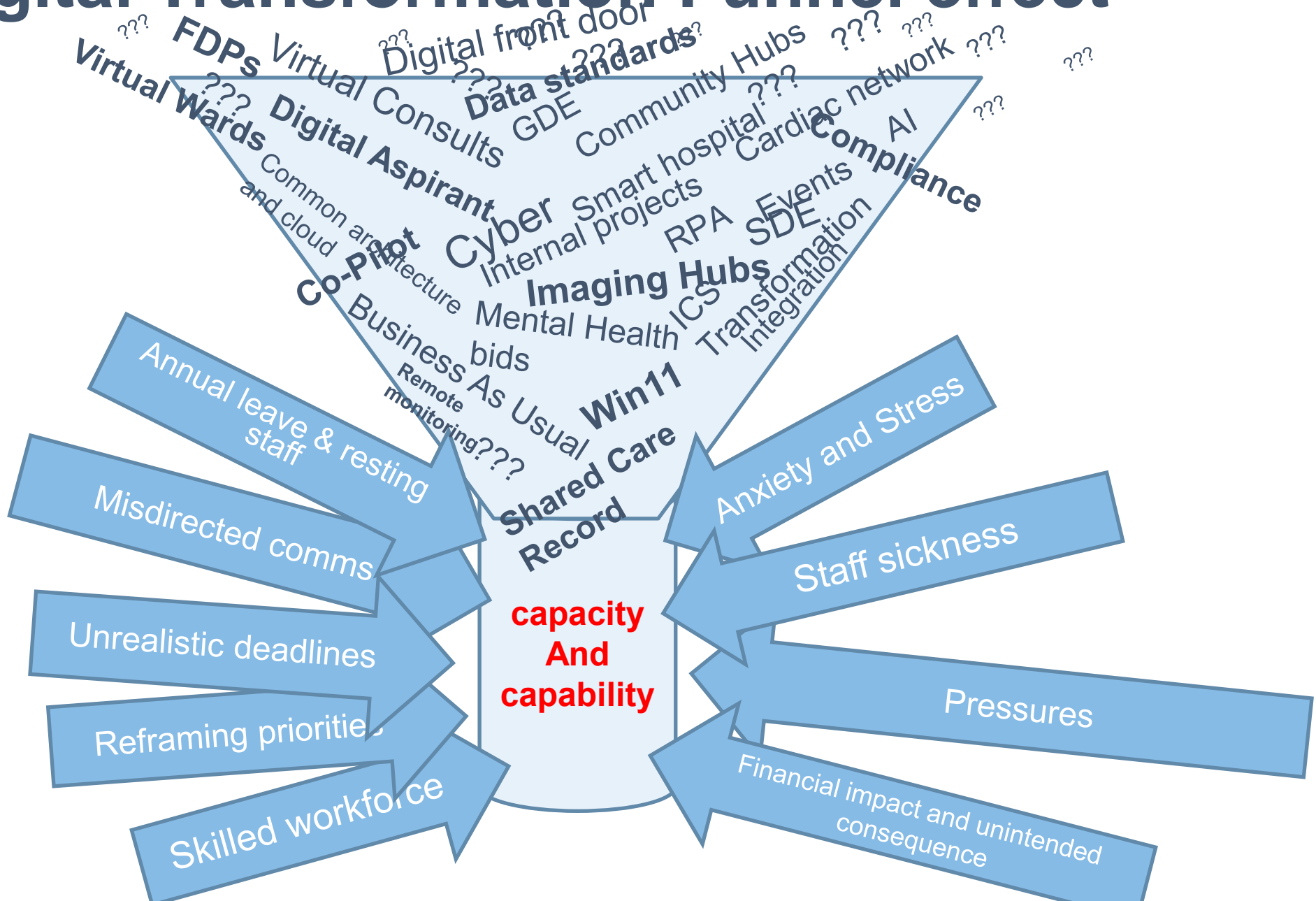
Room 101
Understand the beast: Digital transformation

- **People**
- **Process**
- **Technology**

Adding value is more than cost reduction

BAR HIGHER:

Quality (effective)

Revenue vs. Costs and Effectiveness vs. Efficiency
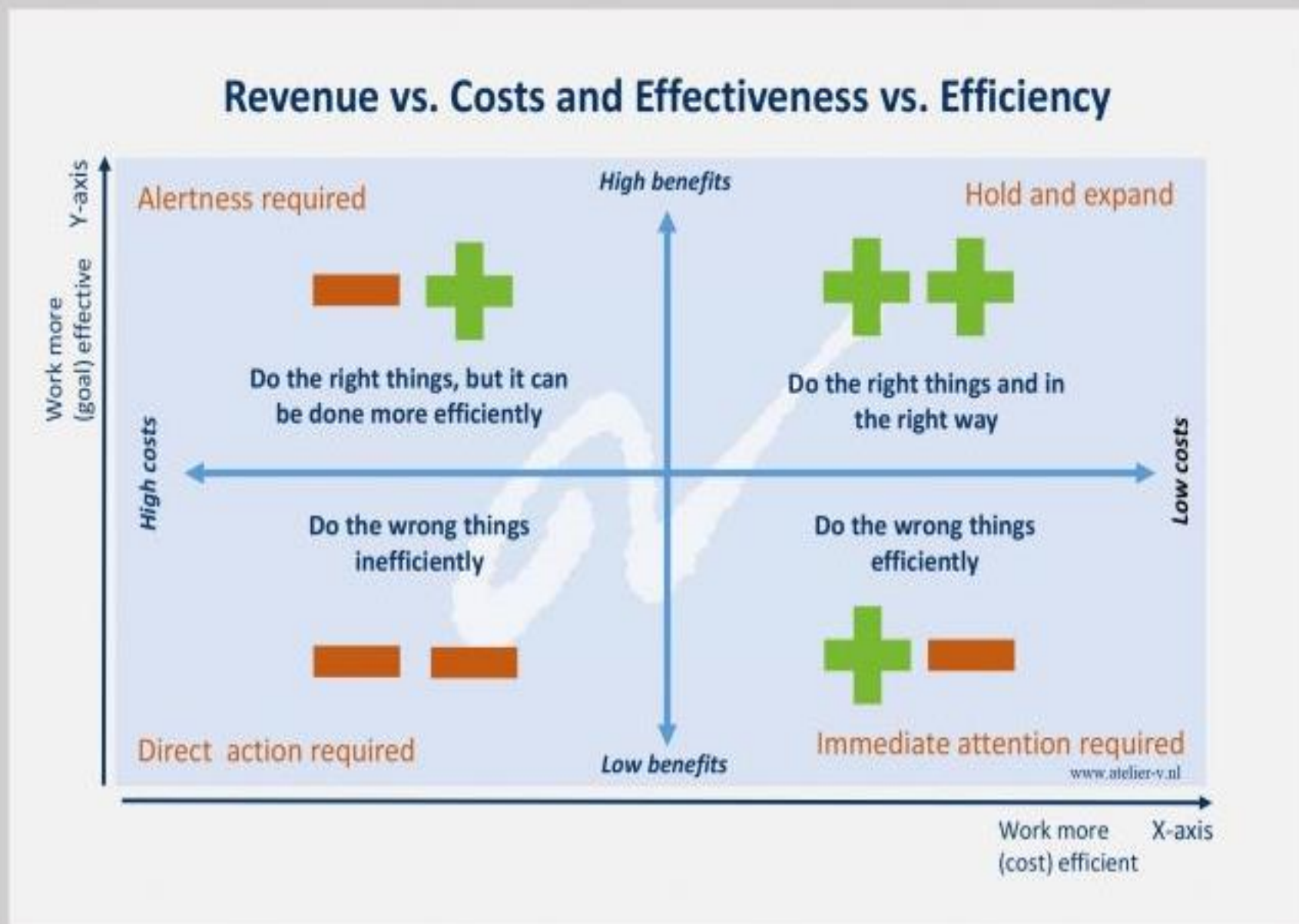
MORE GRIP:

Costs (efficient)

Standards use cases
In hospital (lifecycle)

1

Buying best
Inventory, lifetime and standards
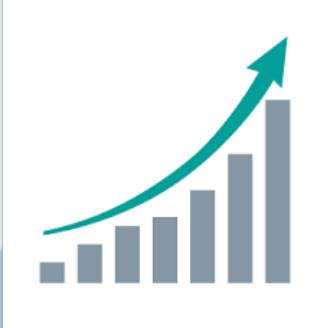
EDC Gold Inventory Management (P2P/PEPPOL)

2

In hospital efficiency and safety
Traceability;
Person, product, process, place

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31 MOTOROLA

Traceability and Location numbering (GLN)

Patient identification (GSRN)

Catalogue management (GTIN)

Realtime lab reporting

Patient identification (GSRN)

Asset/equipment (GIAI)

3

End of product life/Disposal
Replenishment, Sustainability, bigdata e.g
- Patient level costing and service line reporting
- Real time lab resulting through interoperability
- Safety - Reduced drug errors
- Reduce/avoid never events
- Efficiency - Ward Audits
- Implantable devices Remote care
- Tracking equipment

Producivity? So what…

Problem	GS1 Technology	Was	Benefit (now)
Ward audit	RFID for assets (GIAI)	0.5 Day of nursing time	<2 mins
Remote care	Fysicon (implantable cardiac device monitoring) for patients	1000 patients prior to pandemic	5300 patients
Lab resulting	Interoperability for patients	24 hours prior to interop	Realtime
Medicines safety	Wristband for patients	Unknown number of times wrong patient given wrong medication	214 potential incidents avoided in 6 months
Buying	EDC Gold for Trade identification	Extensive time spent materials management tome to manually to enter data (1 – 2 hours p/d)	Time savings, precision reporting e.g. automatic repeat orders (30 minutes saved of materials management staff p/d)
Patient ID	Bloodtrac (Blood wastage) for Patients	Reduced from 5%	Less than 1%
Inventory/stock	EDC Gold	Hours of storekeepers time	Time saving and accuracy but also track dates (when things go out of date we know e.g. Heart valves)

Standards use case 1
Out of hospital remote care
Implantable devices for safety and efficiency (Fysicon)

- GS1 compliant barcodes for scanning implantation, follow up of pacemakers and defibrillators

- The barcodes have a crucial role in identifying patients that may be adversely affected by field safety notices and product recalls.
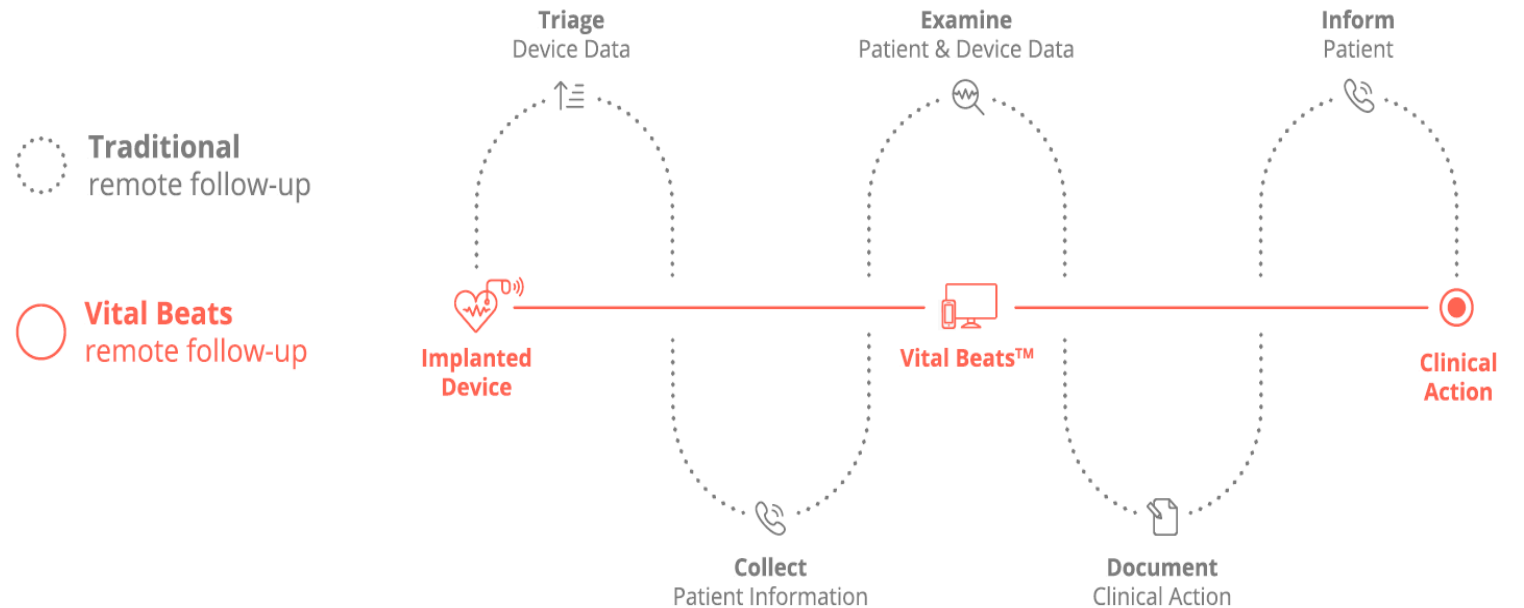
Standards use case 2
Interoperability
Pathology Positive Patient ID pathway (PPID)

Standards use case 3
Barcode Medicines Administration

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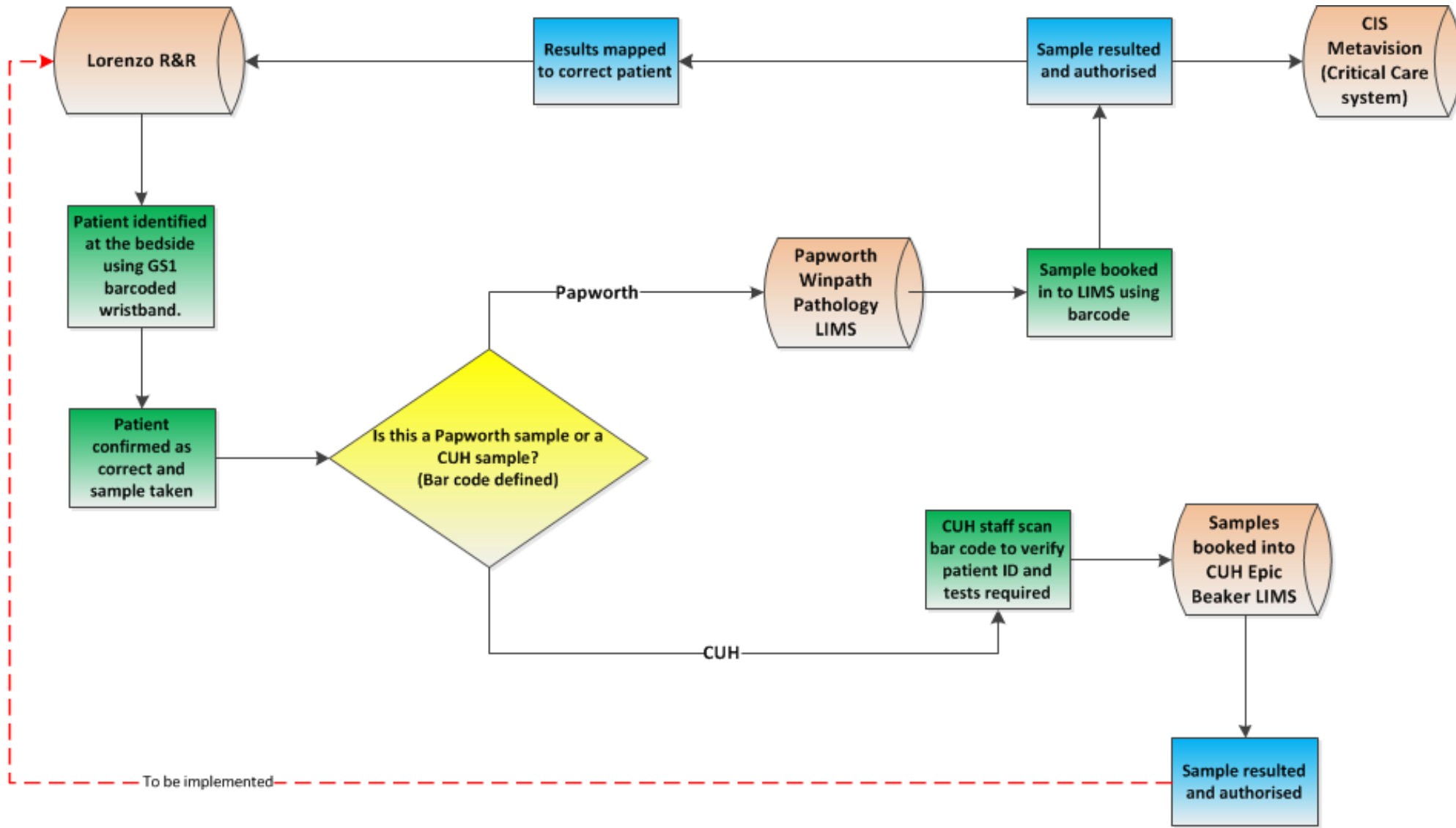NHS Foundation Trust

Traditional patient identification

Patient identification using GS1 standards

Patient/Nurse consultation

Scan GS1 compliant patient wristband

Data stored with clear audit trail

Verbal/manual cross checking of patient details on patient wristband against EPR system

EPR system confirms positive patient identification and opens up corresponding drug chart or confirms correct patient drug chart already open

System flags incorrect patient wristband scanned. Cannot record medicines administration

Do I have the correct patient?

Administer medication to correct patient

Administer medication to patient

- Use of GS1 compliant patient wristbands to confirm patient identity prior to medicines administration

- Improves patient safety ensuring the **right patient** receives prescribed medication

- In Q1-Q3 2022-23:

  - 56,874 successful scans were performed - ensured medicines were administered to the correct patient

  - 214 occasions where the system flagged medicines were about to be administered to the wrong patient.

Safe, sustainable and cost-effective
Cover your bases for a productive, safer and cost effective…

- Context
- Effective starters and leavers process (buy what you need)
- Sign off for new technology (VFM - Total Cost of Ownership: Opportunity, Depreciation, Optimism Bias, Contingency, Inflation, Indexation, VAT, cap/rev)
- Streamlining enterprise
- Standardisation vs 'eggs in one basket' (business need/healthy market)
- Secure reselling/recycling?
- Process/Recall unused devices?
- Monitoring and continuous improvement, metrics
- Uses and promise of patient information
- Resilience, sustainability, agility and adaptability
- Move from FOMO to problem solving
- Maturity models think of core, system and universal capability (Micro/Macro)
- Tax-payer and ethics - will it stand the daily mirror test,

POOR   GOOD
COST-EFFECTIVE
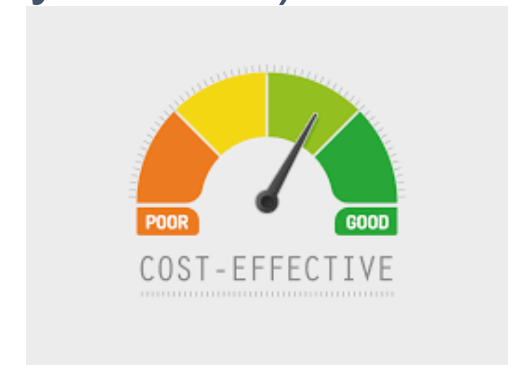
Creating value:
Open standards for interoperability?

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What you need for interop…

- Systems that have capability to talk to one another
- Integration Engine
- Open Application Interfaces
- Data standards; HL7/FHIR/OpenEHR/GS1
- Dev Ops/skill and knowledge/Access to services

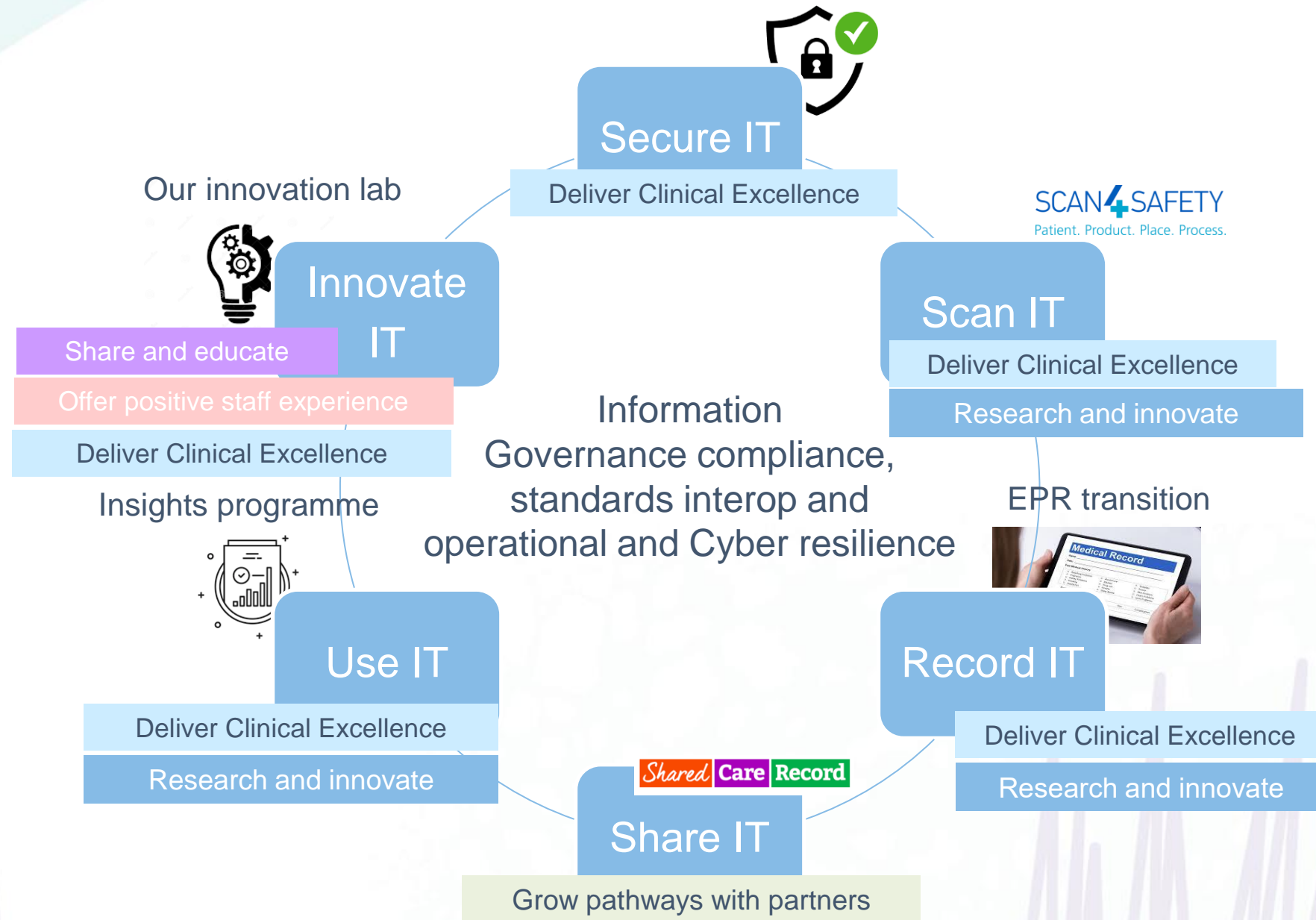VS Proprietary tools: All in for one, but increased cost, lock in and making money?

Beyond value

Our digital and data strategy to support
clinical excellence and world beating care 2024-26

November 2024
Final edition 7.2

NHS
Royal Papworth Hospital
NHS Foundation Trust

Compassion
Excellence
Collaboration

Deliver IT!
Our 6 point digital and data delivery plan

Secure IT

Deliver Clinical Excellence

Our innovation lab

SCAN4SAFETY
Patient. Product. Place. Process.

Innovate IT

Scan IT

Deliver Clinical Excellence

Research and innovate

Share and educate

Offer positive staff experience

Information Governance compliance, standards interop and operational and Cyber resilience

Deliver Clinical Excellence

EPR transition

Insights programme

Use IT

Record IT

Deliver Clinical Excellence

Research and innovate

Deliver Clinical Excellence

Research and innovate

Shared Care Record

Share IT

Grow pathways with partners

Some takeaways…

Interoperability supports productivity, and SHAVING COST….

- **S** tandards focus (Computer applications)

- **H** ealthier market place (adopt standards vs proprietary tools)

- **A** gnostic capabilities

- **V** ersatile: Supports innovation (connecting) and drives competition

- **E** nsures a viable NHS avoiding monopolies or duopolies

- **R** esilient first: Be wary of vendor lock in, lights out (all out) (Cyber)

- **S** ustainable, cost effective, vendor agnostic and ethical (Data = Golden thread)

…..**Focus on productivity outcomes…..**

Leadership

Andrew Raynes
**Chief Information Officer
Executive Director**

Dr Chris Johnson
**Chief Medical Information
Officer,
Associate Medical Director**

Adri De Souza
**Chief Nurse/AHP
Information Officer.
Cystic Fibrosis Team Lead
Dietitian**

Chris McCorquodale
**Deputy Chief Pharmacist
Chief Pharmaceutical
Information Officer**

Shalini Chandran
**Chief Operations Information Officer
Divisional Director of Operations –
Clinical Administration**

Dr Raj Vaithamanithi
**Dep Dir of Digital/
Chief Information
Officer**

Simon Brown
Head of Digital

Cath Willcox
**Head of Information
Governance and
Health Records**

Phil Hammond
Head of Bi and Analytics

Simon Page
Dep EPR Prog. Director

"Data about people's experiences of health and social care has huge potential for improving services and discovering more effective treatments and ways to provide care. Those benefits will not be realised without public trust."

Dame Fiona Caldicott

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