Welcome

Dan Prescott
Group Chief Informatics
Officer

Dave Pearson
Hive Programme
Director

Sarah McGovern
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Officer

Hive is a major clinical transformation programme that has an innovative **Electronic Patient Record** solution at its heart, powered by **Epic**, and means **wide-spread change and improvement** in every part and process our the organisation.
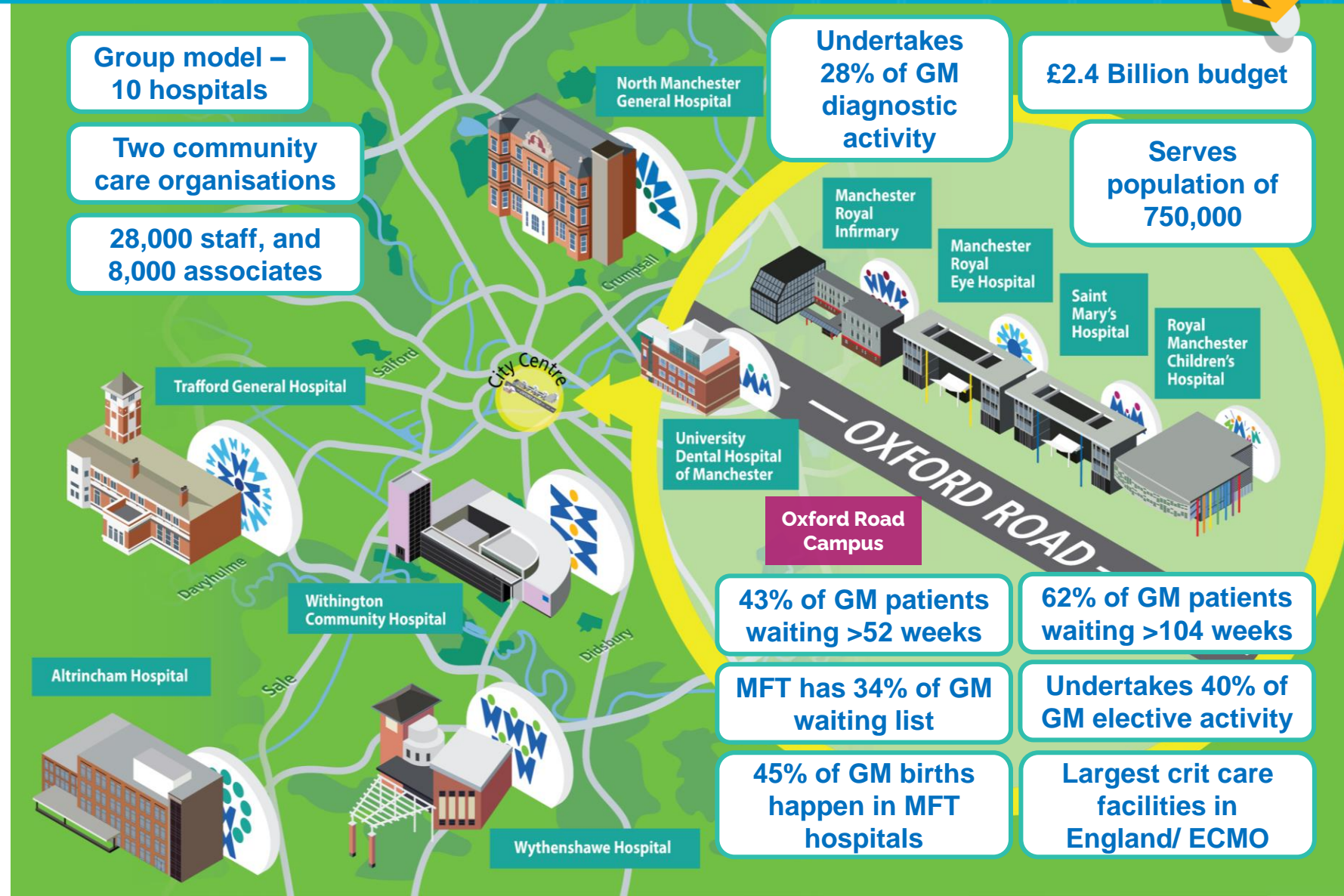
Epic is a tried and tested software solution that that been tailored for MFT and brings all our **patient information together** enabling us to hold a **single trust-wide hospital record** for each patient with all information accessible across all sites.

About MFT

- Largest provider of specialist services in England, covering a population of 2.8 million. Sole provider for several tertiary services across Greater Manchester

- Leading Trust in the North-West for research and teaching

- Unique clustering of clinical services with life sciences and academia

- An 'anchor' organisation supporting the transformation of public service provision.

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Group model – 10 hospitals

Two community care organisations

28,000 staff, and 8,000 associates

Undertakes 28% of GM diagnostic activity

£2.4 Billion budget

Serves population of 750,000

North Manchester General Hospital

Manchester Royal Infirmary

Manchester Royal Eye Hospital

Saint Mary's Hospital

Royal Manchester Children's Hospital

University Dental Hospital of Manchester

Trafford General Hospital

Salford

City Centre

Crumpsall

OXFORD ROAD

Oxford Road Campus

Withington Community Hospital

Davyhulme

Didsbury

Altrincham Hospital

Sale

Wythenshawe Hospital

43% of GM patients waiting >52 weeks

62% of GM patients waiting >104 weeks

MFT has 34% of GM waiting list

Undertakes 40% of GM elective activity

45% of GM births happen in MFT hospitals

Largest crit care facilities in England/ ECMO
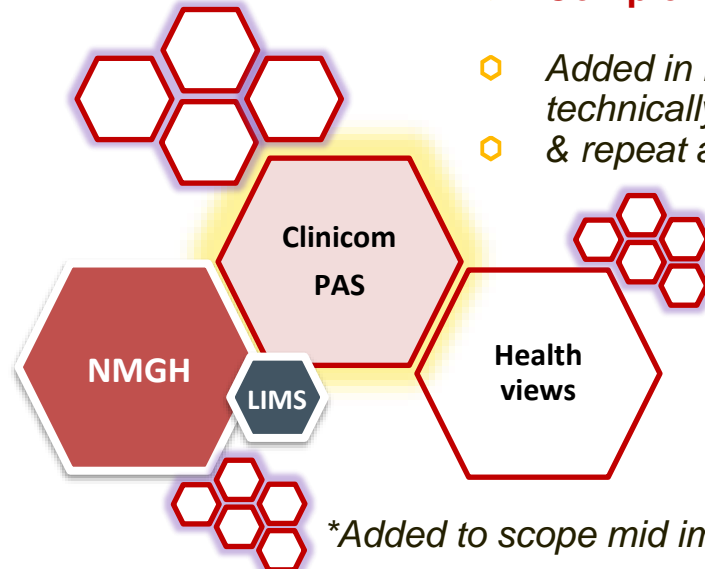
Digital Landscape – Pre-September 2022

- Multi campus Organisation
- Three PAS and EPRs
- Multiple & duplicate 3rd party systems
- Multiple LIMS
- Manchester and Trafford Local Care Organisation (LCO) services

- Multiple PMIs in use
- Paper & part electronic case notes
- Multiple in/out data flows
- Joining of data for reporting

- **Complex integration!**

- *Added in NMGH, operationally and technically separate*
- *& repeat all of the above!*
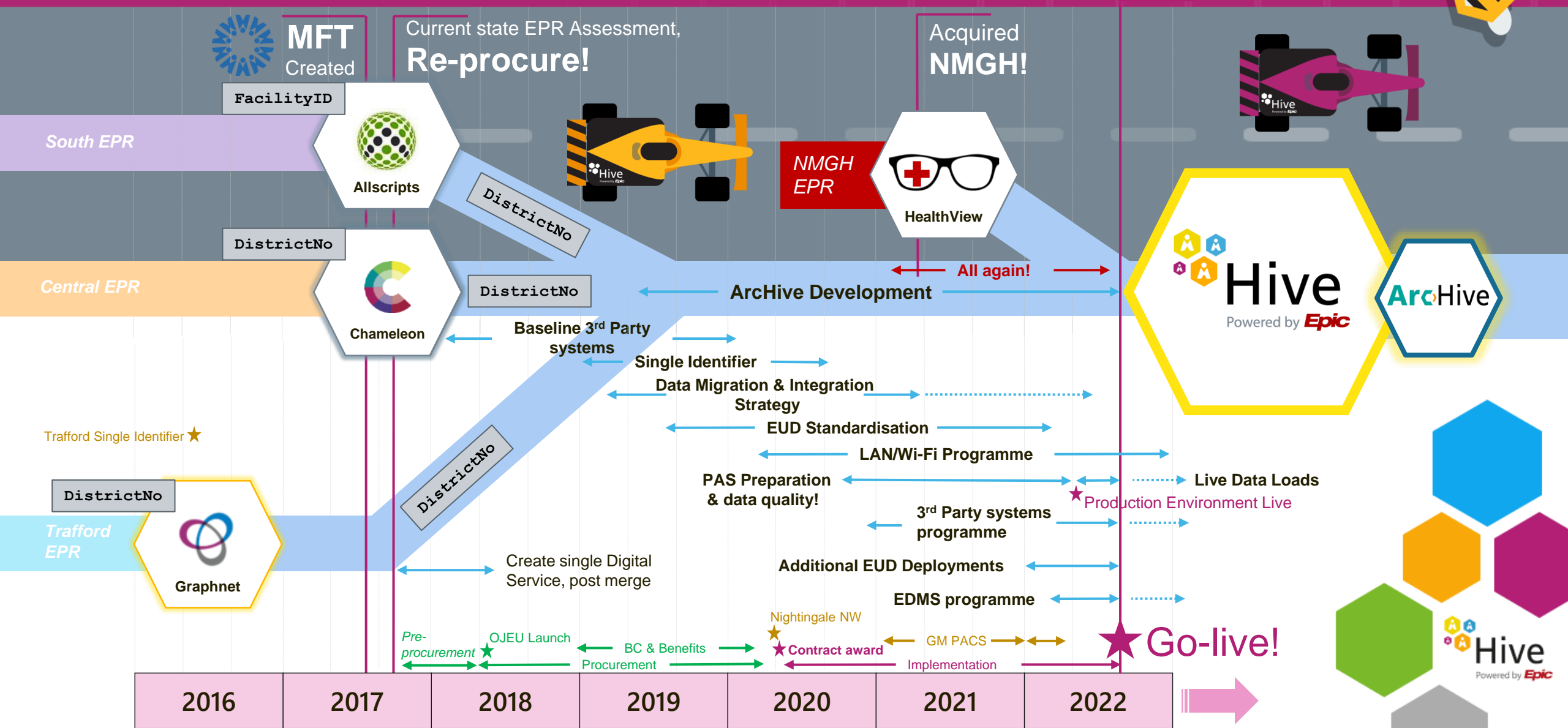
*Added to scope mid implementation

- Multi campus Organisation +1
- Single PAS and Core EPR
- Consolidated 3rd party systems
- +additional 3rd party systems
- Single LIMS
- Medical Device integration

- LCO Services

- Single PMI
- Not creating paper casenotes
- Consolidated in/out data flows
- Combined reporting data
- Simplified integration
- In Patient context electronic archive
- NMGH fully integrated

Deployment and PAS Data Migration

Data Migrated	Testing	Infrastructure	Interfaces
Records: 4,000,000+ Different Systems: 80	Mapped Record: 32,000 App/Integ. Scripts: 800+	Physical VM Host: 180 Virtual Machines: 2200+	Developed: 130+ Different Vendors: 40+

	*MPI total	% Duplication
January 2022	7,022,691	17%
September 2022	5,748,509	2.8%

NMGH addition generated significant duplication!

Data Type	Electronic migration	Final Success load %	Manual migration
Future appointments	137,880	90.9%	12,505
Pathways	1,072,781	99.5%	5,415
Referrals	1,032,822	99.1%	8,882
Waiting Lists Day Case & Surgical	559,179	92.6%	33,803
Waiting List – Outpatients	559,182	99.96%	N/A
Waiting List – Invasive cardiology	944	98%	N/A
Grand Total	2,739,950	98%	60,605

Labs & Pharmacy validation was a huge undertaking that had weekly Executive oversight
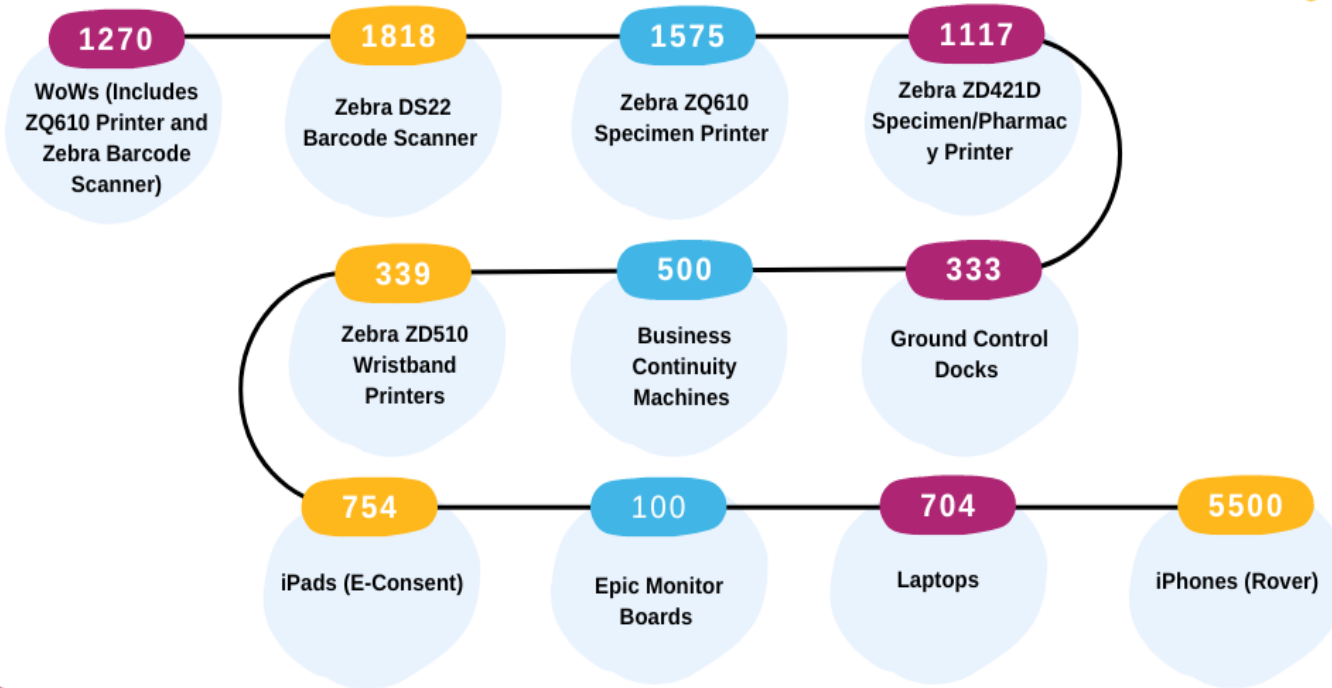
*MPI – Master Patient Index

Technology Landscape in numbers

7,200 Laptops

1,300 WOWs

5,537 Tablets

30,000 Active user accounts

4000 Affiliates/ Temporary accounts

2000 specimen label printers

1117 Pharmacy printers

19,300 Desktops

110 Ward Screens

5,500 Rover Devices

650 Integrated Medical devices

450 wristband printers

1818 barcode scanners

500 Business Continuity PCs

754 eConsent tablets

333 Rover docking stations

130 Interfaces

40 different software vendors

Hive
Powered by Epic

Technology Deployments in numbers

DEVICES DEPLOYED

- **1270** — WoWs (Includes ZQ610 Printer and Zebra Barcode Scanner)
- **1818** — Zebra DS22 Barcode Scanner
- **1575** — Zebra ZQ610 Specimen Printer
- **1117** — Zebra ZD421D Specimen/Pharmacy Printer
- **339** — Zebra ZD510 Wristband Printers
- **500** — Business Continuity Machines
- **333** — Ground Control Docks
- **754** — iPads (E-Consent)
- **100** — Epic Monitor Boards
- **704** — Laptops
- **5500** — iPhones (Rover)

Deployment common issues

- Wi-Fi Printing
- LWS Location Information
- Dual Barcode Scanners
- Number of Deployment &Testers
- Device Functional Type
- Missing LWS Records
- Missing EPR Records
- Missing Icons

The Journey to Go Live

Vision

Our vision for Hive is to transform the quality of care and the experience for our patients and staff by having the right information **in the right place at the right time; first time, every time.**

May 2020: contract awarded to **Epic** following competitive dialogue procurement process.

Julia Bridgewater (Executive Chief Operating Officer) appointed as **full time Hive SRO** September 2021

The programme team worked on a comprehensive critical path to deliver a **safe & efficient Go Live**

Comprehensive and wide-ranging **communication strategy** which includes workshops, drop-in sessions, intranet messaging, social media…

Robust **risk management** strategy ensured **'Board to Ward'** oversight of key risks - Training, NMGH complex pathways, staff capacity for manual data migration, reporting and LCO

Significant **Operational Readiness** programme with dedicated Hospital and Corporate resource from clinical, nursing, transformation and operational teams.

Day-120, 90, 60 and 30 face-to-face **Go Live Readiness Assessments (GLRAs)** took place with each Hospital to ensure we were ready!

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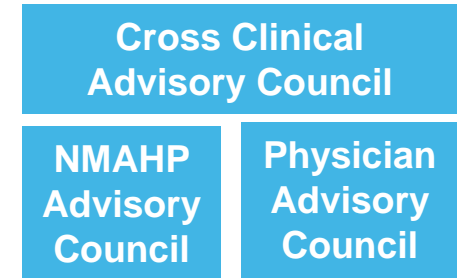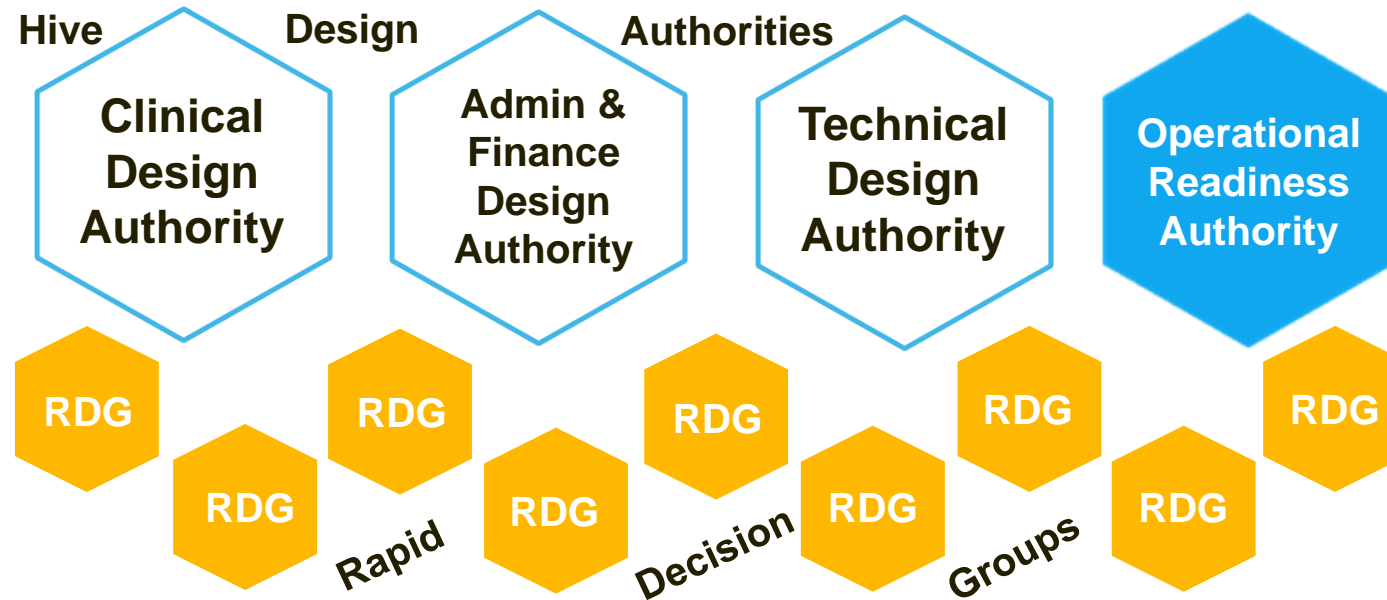
The Journey to Go Live – the final steps!

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Our Epic Journey to Hive — Powered by Epic — 2022

Improved clinical quality

10th July — 60 Days to Go Live milestone reached!

JULY — This is when the staff training for Hive began

Improved staff experience

Digital transformation

Workflow Dress Rehearsals — Scenario-based tests of the Hive system's configuration

- **NMGH –** 23rd Aug
- **MRI –** 24th Aug
- **WTWA –** 26th Aug

9th August — 30 Days to Go Live milestone reached!

AUGUST — Let's get our patient info updated! Clinical & Admin staff will start migrating and inputting critical information as part of Manual Data Migration work.

Look out for more info on **Personalisation & Login Labs** to ensure a smoother start to Go Live, and a system that works for you

SEPTEMBER — We start using planned downtime processes for current systems to get ready for Go Live

5th September — Cutover period begins

One Trust-wide hospital patient record

8th September — Hive and the MyMFT Patient Portal Go Live!

Improved patient safety

Look out for your local Super Users and Floor Walkers who will support you through go-live!

Preparing for Go Live couldn't be easier... Visit the Hive Hub on the staff intranet today to learn more about Hive.

TESTING our equipment - every piece of equipment was tested to ensure it was Hive ready, 16,000 pieces of IT equipment tested.

DATA transfer began in July – loading live data into Hive.

DRESS REHERSALS – took place - comprehensive practice using simulation, scenarios and shadowing current patients.

Huge **TRAINING** programme for our ~30,000 staff. Face to face across 80+ rooms, provided by 120 full-time trainers plus MFT Peer Trainers, supplemented by eLearning sessions.

GO LIVE - Floor Walkers and Super Users provided 'at the elbow support' during Go Live. ~3,000 Super Users, 230 external NHS Floor Walkers and 200+ Epic Floor Walkers!

We implemented command centres for 5 weeks post Go Live…

Hive — Powered by Epic

# Go Live & Hyper Support Phase

Hive Goes Live

Overall Go Live Position **better** than planned and we went live on schedule at 5.35am on 8th September

Feedback from outside MFT, including from Epic is that this has been one of Epic's **best Go Lives**.

Incredible achievement – **Proud of our staff !**

Size and scale. **Biggest Go Live in Europe**, second worldwide

Complexity. Legacy systems, merged organisations, NMGH disaggregation and Local Care Organisations.

2022
September
8
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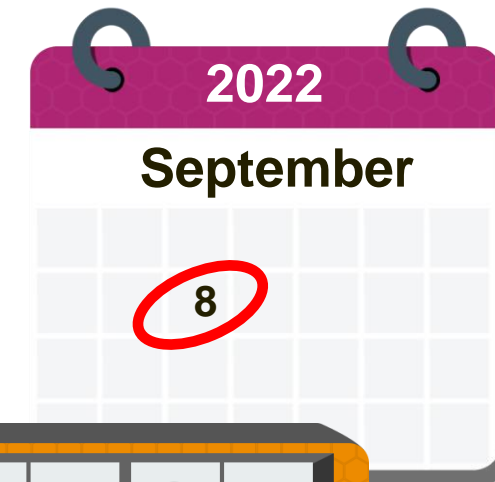
Hyper Support Period

Hyper support **Command and Control** ran for 5 **weeks.**

24/7 Hive command centre to respond in real time to resolve issue/risks, Super Users provided at the elbow support to staff along with Floor Walkers from Epic and supporting Trusts.

Pathway Councils were launched providing a channel for the workforce to input into changes and how these impact MFT.

Between July and September 2022, telephone calls and support tickets to the IT Service Desk **increased by 168% and 166% respectively**.

In September alone, **108,000** combined IT tickets & calls were submitted.

Key themes and issue resolutions

As **expected and planned** for, we responded to and **resolved** a huge number of **escalations:**

Device integration (ECG machines).

Build fixes (Referral routing, scheduling of pre prescribed medications, results routing, consultant pools, medical task list assignments, link to NHS spine).

GP communication (new workflows, lab and imaging results) and interfaces with labs across GM.

Technical and kit (NMGH downtime, Wi-Fi coverage, **printing configurations,** rover device configuration/access.

A number of **key themes** are being overseen by the Pathway Councils, **Pathway Council Oversight Committee** and bespoke Task and Finish Groups.

Depth of training and **understanding of workflows** (upskilling to use the system to its maximum)

Pharmacy (financial reconciliation and medication pathway workflow, BCMA)

Data quality & reporting (legacy data transferred into Hive, reporting & tracking, dashboards)

Transfusion pathway

Provider care teams

Risk Management
Changing nature of Hive risk profile (Move from programme to BAU)

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Pre Go Live | **Go Live** | **Stabilisation** | **Optimisation**

5 High level risks (LCO, NMGH, Operational Readiness, Training & Safety)

Critical Safety issues & escalations

Solid governance oversight has enabled confident CQC response

High priority Optimisation projects – Transfusion

Critical Safety Benefits of Hive initiated and delivering real patient safety improvements

Risk of not delivering benefits

Workforce, Quality, efficiency, finance. Hive becomes **enabler** for challenges ahead. Must ensure we have **capacity** to deliver benefits realisation

Transformation is the key to success!

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Stabilisation and beyond: Governance & Structures

Stabilisation Phase

- To ensure we are stable, safe and preparing for business as usual **Robust Stabilisation Governance** followed the Command Centre phase:

  - Oct-Dec: Phase 1: Ensuring we are stable and delivering critical safety changes

  - Jan- end Mar: Phase 2: Commencing implementation of BAU processes and sign off 2023/24 plan

- **Post Live Readiness Assessments** (at 60, 90, 120 days) - informed by Stabilisation metrics ensuring operational process embedded

- Stabilisation marks the transition from **Hive being a programme** to the **key vehicle for facilitating our clinically led digital transformation** and delivery of our full **safety, efficiency and workforce** benefit.

2023-24 Governance

- Scale, complexity and journey of culture change to deliver **Hive Benefits** is significant

- 2023/24 **Transitional year is agreed** in recognition of delivery challenge (Hive/Informatics organisational leadership structure agreed)

- Built on successful **leadership partnership** between Hive/Informatics/Transformation

- Board level **dedicated Hive SRO remains** in place.

"Don't take your foot off the gas…"

Post-
Go Live

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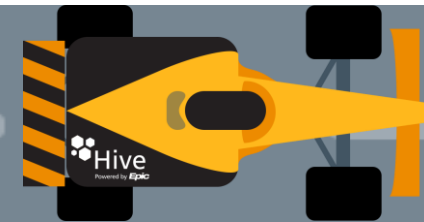
Trust activity since Go Live

MyMFT
151,771 users and 2.3m log-ins

10.8m pharmacy transactions

7,930 babies born

654,744 imaging studies

8.9m lab tests

257,057 emergency attendances

111 transplants

34,792 theatre cases

Activity from Go Live on 8th Sept to 24th Feb 23

Stabilisation Phase Progress

Depth of coding returned to pre-Go Live levels

Outpatient activity returned to pre-Go Live levels

Inpatient activity returned to pre-Go Live levels

Transactional benefits initiated

Transformative benefits now visible

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Transformation & Benefits Realisation

- Transformation plans identified in the Pre-Go Live period ~**100 projects!**

- Many progressed/implemented prior to Go Live, but many relied on the implementation of Hive

- Support on the frontline over Go Live period

- Ongoing implementation of Change projects through Go Live and Stabilisation periods.

- Change plans now aligned across Hive and Organisation to deliver:

  - Hive Benefits
  - Operational priorities
  - Clinical priorities
  - Waste Reduction Programme

1 Plan

Hive is our enabler for change…

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Hive and MFT Priorities

Elective Care

- 25% reduction in Outpatient FU
- 5% of Outpatients to be PIFU
- 25% of Outpatient appts. to be delivered via video / phone
- Theatre Utilisation 85%

Clinical Priorities

- Patient outcomes (SHMI, LOS, Readmissions)
- Provider Care Teams
- Medication Management
- Reduction in Adverse Incidents

Urgent Care

- 76% 4 hour waits
- 92% bed occupancy
- Ambulance hand over delays
- 12 hour waits
- Decrease No Reason to Reside
- Improve SDEC utilisation
- Increase discharge before 2pm

Hive Change Projects - Outcomes

- We will reduce cancellations and DNAs
- We will increase clinic utilisation
- We will enable patients to access their information more easily by using MyMFT
- We will improve SDEC utilisation by using Hive Triage Hub
- We will improve timely discharge of patients through using standardised discharge documentation in Hive
- We will administer medications using barcode scanning to reduce medication errors
- We will use Provider Care Teams to provide alerts to Clinicians and improve patient safety
- We will enable patients to attend video appointments more easily using Hive
- We will improve utilization of our theatre lists by standardizing our pre-operative assessment process, and by giving patients 6 weeks' notice of their surgery date

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Hive opportunities and benefits

- 1 EPR giving rapid access and visibility across all areas – teams, services, sites
- Standardisation of pathways
- Standardisation of Admin/Booking and Scheduling processes
- Reduced paper!
- Improved access for patients - patient portal - MyMFT
- Functionality to support clinical decision making e.g. use of Best Practice Advisories

The benefits realisation process

Defining change projects	**Identifying benefits/ KPIs**	**Monitoring and tracking**	**Reporting**
Aligned to capabilities from Hive benefits case and RDGs - Supports operational and clinical priorities	Measurable KPIs identified and defined by relevant stakeholders/ project teams Epic/ Hive Analysts	Use of Hive/ Power BI dashboards used to track, monitor stabilisation metrics. Used to target areas for improvement	Pathway Councils Local Hospital/ MCS level Local T&F Groups Outpatient Steering Group Operational Excellence Board
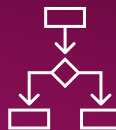
Some of our early Hive benefits

Improvement in Theatre Utilisation and steady reduction of 'late starts' is evident since Go Live.

Positive Patient Identification with **BCMA** avoided 36 critical medicine administration errors since Go Live.

Our new patient portal **MyMFT** launched with Hive – improving patient's access to their MFT clinical information.

Secure Chat has been used to improve communication between teams e.g. Radiology vetting.

Hive has given us a **clear sight of cancer pathways.**

7 Letter turnaround in Outpatient clinics is now **less than seven days.**

Bespoke urgent care workflows have improved the transfer of patients between UEC services.

Single specialty patient tracking lists are now in place across the Trust.

Sharing patient records with other Epic sites is improving patient care.

Standardised discharge letters have reduced duplication and improved accuracy.

Improved **results management.**

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Currently over 25% of our patients use our new online patient portal - **MyMFT**.

Using Epic's MyChart solution, MyMFT is a customised portal that caters for our diverse population and will bring our patients greater access and control over their healthcare and health information - with more and more functionality rolled out on an ongoing basis.

MyMFT allows our patients to…

Have their personal and family's health information at their fingertips with the mobile app and web-portal.

View appointments, clinical letters and results.

Attend online consultations and provide pre-appointment information.

Share their medical record safely and securely.

Easily communicate and engage with us as a Trust.
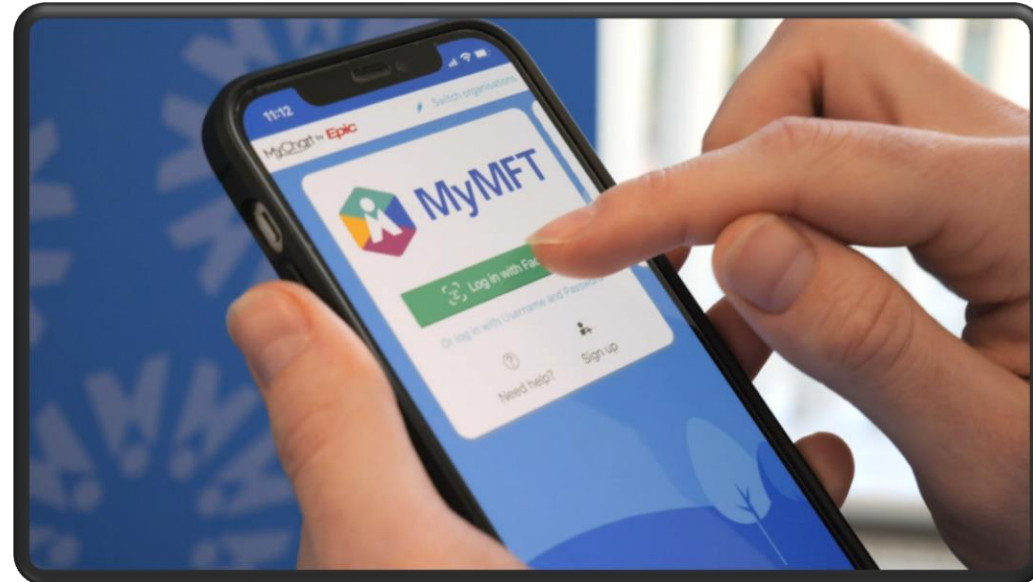
What features on the dashboard?

Governance
- Incidents (including where harm has occurred)
- HSIB (Health Safety Investigation Branch) referrals
- STEIS reportable incidents

Patient experience
- Complaints
- Compliments

Work Force
- Training
- Safe Staffing
- Appraisal Rates

Data Quality Assurance
- MSDS completion reports
- Data field completion reports

Perinatal morbidity and mortality
- Stillbirths
- Neonatal Deaths
- Unexpected admissions to Neonatal Unit
- Babies with suspected HIE
- Neonatal Apgar <7 at 5 minutes
- Skin to Skin rates
- Infant feeding rates

Screening Program
- All screening program KPIs

Saving Babies Lives
- Birthweight less than 3rd centile
- Smoking Rates Booking & Delivery
- Magnesium Sulphate for preterm birth
- Preterm birth in appropriate location
- Antenatal steroids & intrapartum steroids for preterm birth

Operational Excellence
- Bookings
- Births
- Type of Birth
- Average Length of Stay Mother & Baby
- Induction rate
- Bookings 12+6 weeks

Maternal morbidity and mortality
- Maternal Death
- Women requiring L3 critical care
- PPH
- Hysterectomy
- 3rd / 4th degree tears
- C-Section at full dilatation
- Maternal readmissions

Demographics
- Deprivation
- Ethnicity
- Age
- Religion
- Employment status

The dashboard provides a view of over 200 key safety metrics and highlights areas for escalation.

The dashboard focuses on:
- Patient Safety
- Clinical Effectiveness
- Leadership and Culture
- Training and Development

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Early Benefits – Financial

Transactional benefits starting to deliver:

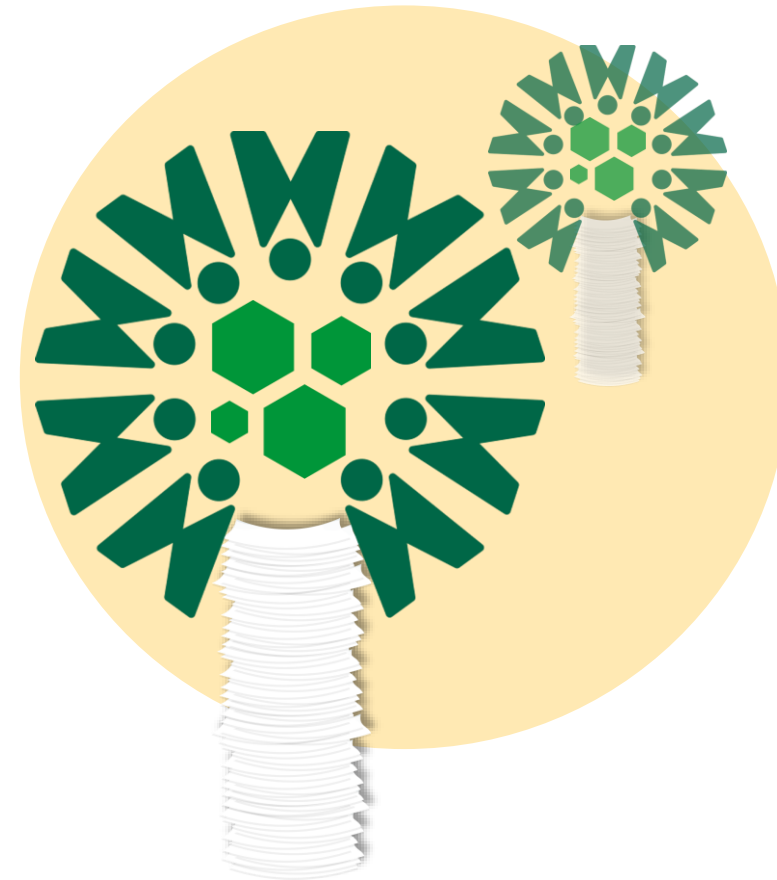Printing consumable savings: £500k in 6 months

Legacy systems: process of decommission of legacy systems started (£300k to date)

Paper lite savings: on track for £1 million in 12 months

All contributing to our sustainability goals…

Thank you
#ThriveWithHive

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