Efficiency and Productivity

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Efficiency Vs Productivity

- Efficiency is about reducing waste and improving the way tasks are done (doing things right)

- Productivity is about increasing the amount produced or achieved with available resources (doing more).

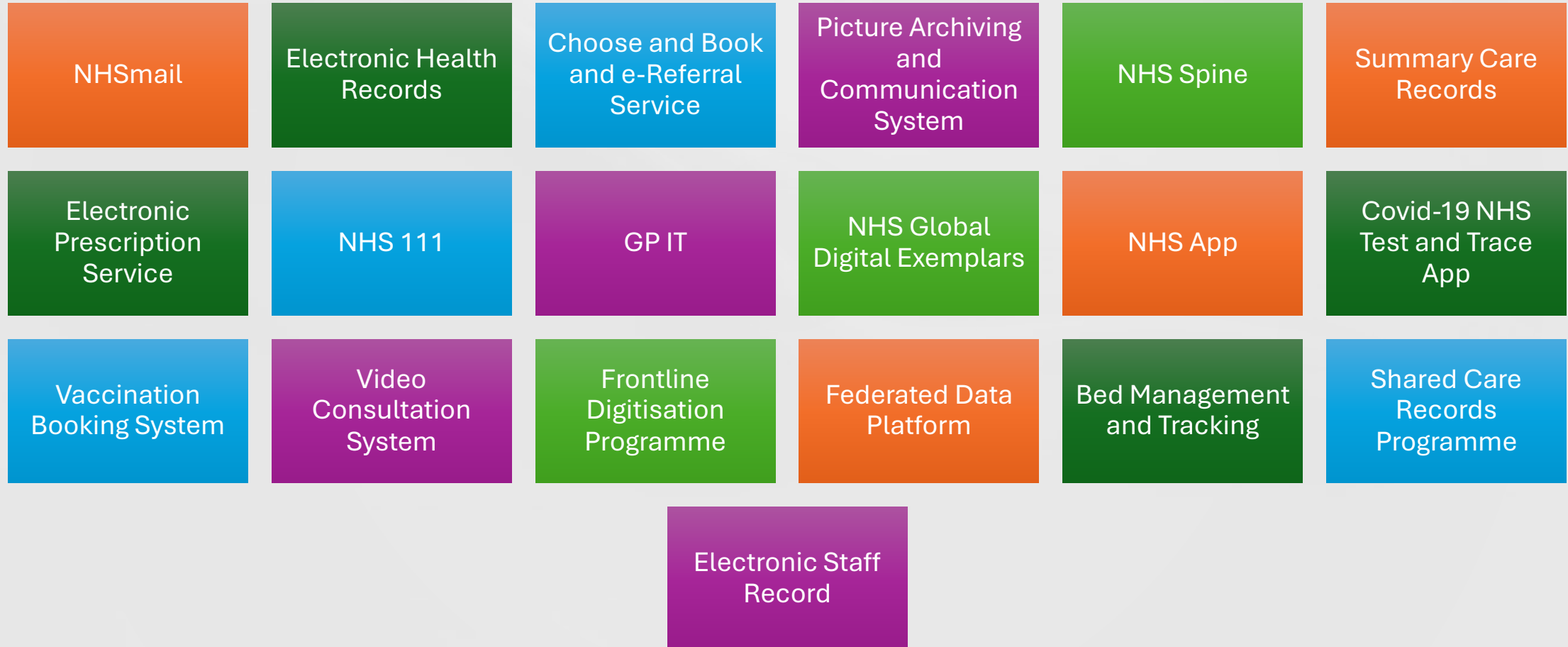| Efficiency	Productivity
Focuses on improving processes.	Focuses on outcomes.
Refers to how well resources, like time and money, are used to complete a task.	Refers to the amount of work that can be done in a certain period.
Measures how many resources are needed to complete a given task.	Measures production, output, or performance rates.
Focuses on quality, such as how well a task is completed or the quality of the output.	Focuses on quantity, such as the number of goods or services produced.

NHS Efficiency and Productivity

NHS England

Treat more patients with the same or less people

NHS Reviews

Review	Focus Area	Key Impact
Kelsey Review / NIB (2014)	Digital Transformation	Led to NHS App, SCRs, and patient-access initiatives.
Carter Review (2016)	Productivity and Efficiency	Encouraged digital rostering and inventory management to reduce waste.
Wachter Review (2016)	EHRs and Digital Maturity	Prioritized EHRs, led to GDE program.
WannaCry Review (2017)	Cybersecurity	Established the NHS Cyber Security Operations Centre.
Topol Review (2019)	Workforce for Digital Future	Called for workforce upskilling in AI, genomics, digital skills.
Darzi Review (2024)	Wider NHS Report	Analogue to Digital.

National NHS Digital Programmes

NHSmail

Electronic Health Records

Choose and Book and e-Referral Service

Picture Archiving and Communication System

NHS Spine

Summary Care Records

Electronic Prescription Service

NHS 111

GP IT

NHS Global Digital Exemplars

NHS App

Covid-19 NHS Test and Trace App

Vaccination Booking System

Video Consultation System

Frontline Digitisation Programme

Federated Data Platform

Bed Management and Tracking

Shared Care Records Programme

Electronic Staff Record

Local NHS Digital Programmes

Clinical Apps	Robotic Process Automation	Surgical Robots	Digital Pathology	Electronic Patient Record
Patient Held Record	Hybrid Mail	Virtual Fracture Clinic	ECommunity	Integrated Discharge Tool
Bed Bureau	Staff Covid Test System	Phlebotomy Booking System	Video Consultation System	Digital Observations
Ward Information System	Site Dashboards	Chatbot	National Weight Management Workflow	12 Week Waiting List Validation Workflow

Current A&E Escalation Level

EMS Level	Majors / Resus Occupancy
3	140%

Patients In Dept.	Over 12Hrs	24Hrs+
119	13	2

Over 4Hrs	Has DTA (12Hr)	Has DTA (24Hrs+)
46	12	2

4 Hour Performance	Next Expected (4hr) Breach	Next Expected (12hr) Breach
62%	15:55	16:20

Tactical on Call (Silver)	Matron of the Day	Strategic on Call (Gold)
Sam Morris	not applicable	Mandy Markall

Hourly Prediction vs Actual Attendance
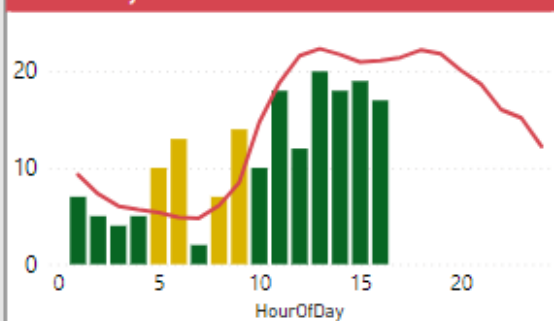
Cumulative A&E Attendances (Actual)
181

Predicted Attendances (Actual)
333

Total Attendances Planned For (Today)
347

Ambulance Data

Waiting to Handover	Waiting Over 30 Mins
2	2

Max Wait to Handover (Minutes)
44

Ambulance Handover Waits (Today)	Ambulance Attendances (Today)
50	78

Longest Wait for Triage	Longest Wait to be Seen by Dr
01:59:02	03:02:02

Average from Arrival to Ready to Proceed
5:32:07

Average from RTP to Discharge
2:04:18

Longest In Dept
24:55:02

Referred / DTA Pts

Team	Ref.	DTA
Acute Medical Unit (AMU)	30	29
Cardiology	2	2
ENT	3	0
Liaison Psychiatry	2	0
Neurology	1	0
Physio/OT	1	0
T&O	2	0
Total	41	31

Patients Admitted Today (Emergency Only) ⓘ

WardOwner	Today Total	Last Hour
Medical	29	2
Network	11	0
Surgical	14	0
WCCS	6	1
Total	60	3

Location Name	Pts	Cubicle Capacity	Longest Wait (Triage)	Triage Waits	Longest Wait (WTBS)	WTBS	DTA	CRTP	MFFD	4 Hr Breach	12 Hr Breach	Esc. Level
Ambulance Assessment - Corridor	3	15		0		0	1			3		
Ambulance Assessment Unit	9	10		0	2hrs 19mins	5	0					●
Ambulance Assessment Unit - Overflow	2			0	44mins	2	0					●
Ambulatory	33	21	1hrs 57mins	1	3hrs	19	4	3		7	2	●
Await Triage	0			0		0						
CDU	5			0		0	1			1		
Childrens Await Triage	1		15mins	1	15mins	1	0					●
Children's Emergency Centre	14	30		0	2hrs 56mins	4	0	3		4		●
Childrens Waiting Room	0			0		0						●
EhPC	0			0		0						
EhPC Wait	3		32mins	3	15mins	1						
Majors - RS	35	35		0		0	21	8	1	25	11	●
Minors	0	0		0		0						●
Navigator	2		12mins	2	12mins	2						
Post Triage Subwait	5		13mins	1	1hrs 23mins	5	0					
Resus Unit	7	8	28mins	2	28mins	2	4	4		3		●
Triage	0			0		0						
Total	119	119		10		41	31	18	1	43	13	

CT Result Waits	Longest Wait for CT		XRay Result Waits	Longest Wait for XRay		Resp PCR Waits	Longest Wait for Resp PCR
9	2hrs 54mins		7	8mins		2	37mins

What Next?

So if Digital is part of the answer to the Efficiency and Productivity problem where do we go from here?

Shiny Vs Non-Shiny

- Shiny is exciting and rare.
- Shiny is sought after.
- Kudos goes to those who have Shiny.
- People might claim they have a shiny when in fact they have non-shiny.
- Shiny is highly valued but this value is not always justified.
- Non-shiny is not as much fun.
- Non-shiny can be good value for money.
- Non-shiny can be lower risk.

Non-Shiny Ideas

- Get the support right. An average time to answer of 3 minutes for 3000 calls a month is 150 hours a month.

    At an average band 4 is worth £24,498 a year.

- Get the infrastructure right. An average time to log in time of 2 minutes per user based on 13,500 users is 450 hours a day or 9,900 hours a month (22 working days).

    At an average band 4 is worth £134,739 a year.

- Get change management right. A priority one incident lasting 90 minutes results in 20,250 hours of unproductivity.

    At an average band 4 is worth £275,602 a year.

- Get end user training right. Research by NHSE (HEE) states that 60 minutes of good training can result in 90 minutes of productivity gains per week.

   At an average of band 4 it is worth £12,365,662 year.

Shiny Ideas

- Good, optimised electronic patient record system
- Telemedicine
- Artificial Intelligence and Machine Learning including Natural Language Processing
- Robotic Process Automation (less shiny)
- Digital Twin Technology
- Augmented Reality and Virtual Reality
- Predictive Analytics
- Clinical Decision Support Tools
- Shift Left to Patients (bookings, measurements, progress notes)

Shiny Skills

- Rare
- Expensive
- Multidisciplinary
- Sometimes solution specific
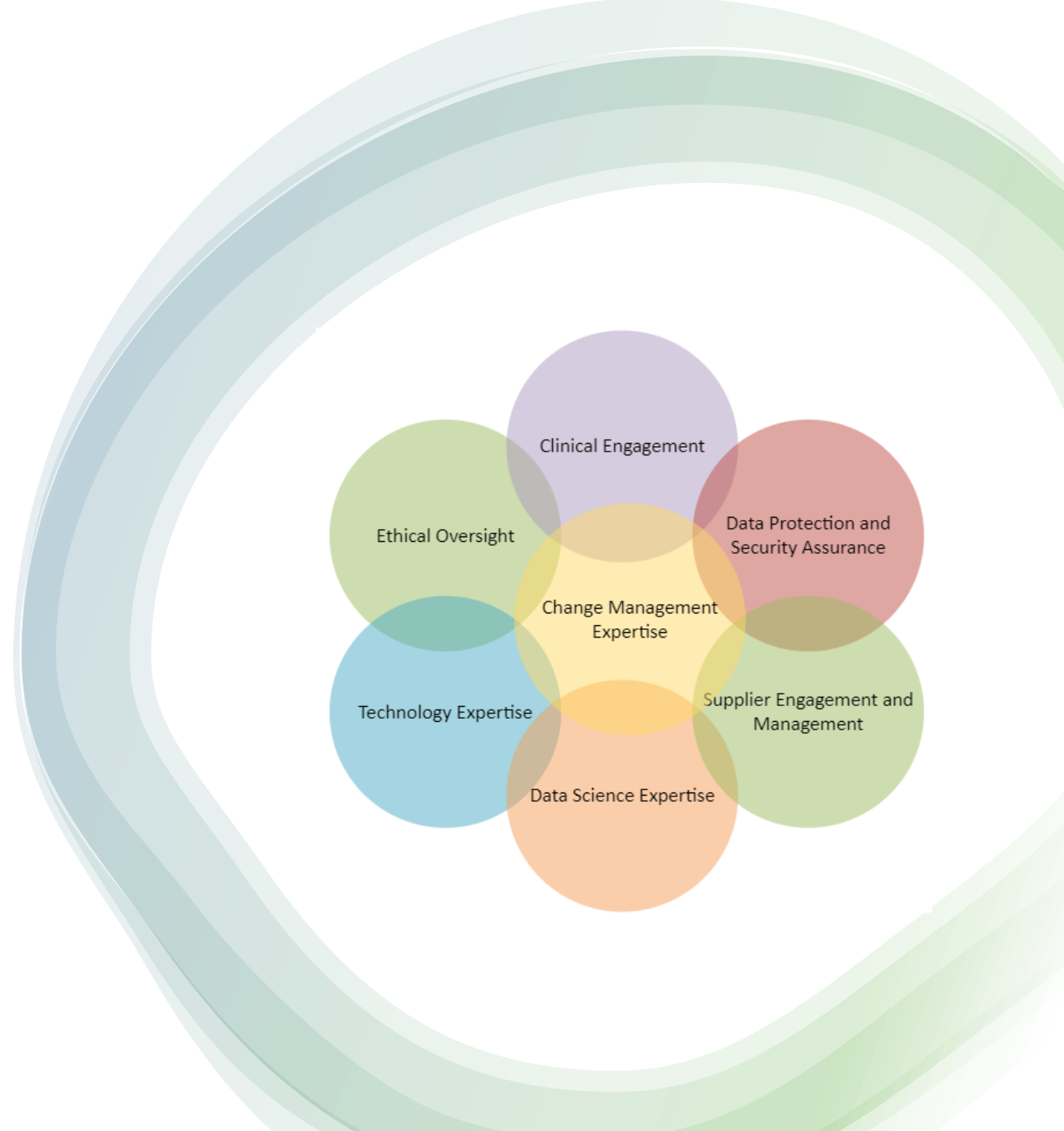
Beware of Benefits

- A safe nursing ratio for example 1:8 on a ward will always be the safe nursing ratio!

- Increased time to care might help reduce length of stay, reduce falls, reduce errors but how do you prove it?

- Not everyone will be motivated to improve productivity.

- It is rare for a single change to be made and allowed to operate for long enough for it to be measured on its own.

- Chief Finance Officers will only be interested if there is true cash out or a significant improvement in activity and this will be hard to prove.
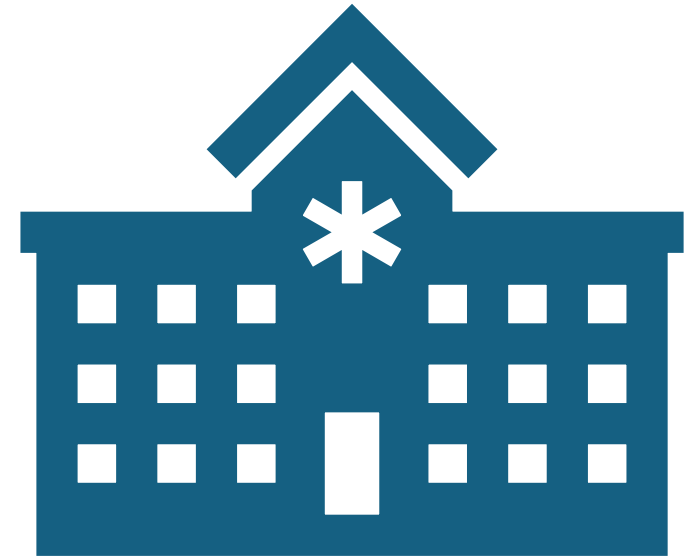
Digital Efficiency and Productivity Success

Problem/Challenge/Opportunity Clear?

Efficient for who?

Measured how?

Value calculated how?

Real cash out?

Novelty of solution?

Access to end users?

Clinical safety assured?

Productivity gains as a result?

Questions