About NHS Digital

We are the national information and technology partner for the health and care system.

Our team of information analysis, technology and project management experts create, deliver and manage the essential technology infrastructure, digital systems, services, products and standards upon which health and care professionals depend.
Vision Statement
By 2020, we will have revolutionised the way technology, data and information are used to transform the delivery of England’s health and social care services.

Our priorities
- Ensure that every citizen’s data is protected
- Establish shared architecture and standards for the benefit of everyone
- Implement services to meet national and local needs
- Support the organisations to get the best from technology, data and information
- Make better use of health and care information
Our services

- **Care Identity Service**: 410,000 unique logons/day. 30,000 new cards issued every month.
- **Spine**: Average of 745M messages per month. Peak of 46M in one day.
- **Electronic Prescription Service**: 99.4% Pharmacies 1 billion items dispensed and claimed.
- **Summary Care Record**: 98% of GP practices now contributing.
- **HSCN**: 40,000 connections supporting 1.3 million NHS end users.
- **NHSmail**: Over 1 million secure mailboxes. 11 million emails a day.
- **NHS Choices**: Health information to 11,000,000 visitors per week.
- **e-Referral Service**: Approx. 12.4 million unique bookings in 2017.
- **Secondary Uses Service**: Holds 10 billion pseudonymised records.
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The Future
# Building an integrated, paper-free health and care system

10 domains with 33 programmes

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<tr>
<th>A</th>
<th>Patient engagement: Self-care and prevention</th>
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<td></td>
<td>Help patients to take control of their own health and care and reduce the pressure on frontline services.</td>
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<th>B</th>
<th>Urgent and emergency care</th>
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<td>Improve telephone and online triage and provide better technology to support clinicians so that treatment is better targeted.</td>
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<th>C</th>
<th>Transforming General Practice</th>
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<td>Use technology to free GPs from time consuming administrative tasks and provide patients with online services.</td>
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<th>D</th>
<th>Integrated care and social care</th>
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<td>Inform clinical decisions across all health and care settings and improve the experience of service users by enabling and enhancing the flow of patient information.</td>
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<th>E</th>
<th>Digital medicines</th>
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<td>Give patients greater choice and added convenience by enabling them to choose where, when and how their medicines are delivered. Improve prescribing accuracy.</td>
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<th>Elective care</th>
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<td>Improve referral management and provide a better treatment choice for patients by automating referrals across the NHS.</td>
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<th>G</th>
<th>Paper free at the point of care</th>
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<td>Equip the NHS with technology that will transform care and ensure the workforce has the skills to get the most out of it.</td>
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<th>Data availability for outcomes for research and oversight</th>
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<td>Improve the quality, availability and integrity of health data so that frontline staff, researchers and decision makers are better informed.</td>
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<th>Infrastructure</th>
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<td>Enable information to move securely across all health and care settings by providing and maintaining robust and future-proofed national systems and networks.</td>
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<th>Public trust and security</th>
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<td>Respect the data sharing preferences of patients and keep their data secure in all settings.</td>
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The NHS Digital journey

• Historically an outsourcing organisation

• Strategic decision to in house critical national services

• Worked with development partners experienced in Agile development and continuous delivery

• First national service in housed in August 2014

• Four complex, critical services in-housed in a 12 month period
Resultant Service Landscape

Key
- Operational
- Governance

Service Management

- CIS
- E-RS
- NHS Mail
- SUS
- VISION GPSoC Supplier
- TPP GPSoC Supplier
- EMIS GPSoC Supplier
- Microtest GPSoC Supplier
- Spine Core
- GPES2
- CQRS
- GPET-Q
- LSP Suppliers
- N3
- LCP Suppliers
- GPET-E
- SMO
- Cherwell
- DIR
- Release Management
- Change Management
- Problem Management
- Incident Management
- Security/CareCERT
- Service Owners – National Services
- Service Owners – GPSoC
- ITSMC/Availability
- Capacity Management
- HSSI Management

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Our challenge

- Cultural divergence between Development Teams and Service Management
- Struggling to support pace of change
- Process circumvention
- Growing perception of the wider organisation was that Service Management was a hindrance and not adding value
- Concerned at our ability to cope with the additional workload of Personalised Health and Care 2020
We needed to change to keep up!
The Solution – Service Management 2020

• Initiation of an Organisation Design project within Service Management to radically change how SM works

• Drawing on the Gartner Bi-Modal model, Service types defined :-
  – Type 1 Governance : Legacy externally provided (ITIL Managed)
  – Type 2 Operational : Internally provided (DevOps interfaces)

• Service aligned cells are multi-skilled, autonomous, empowered and use Agile techniques that are aligned with the development teams

• What cannot be devolved to the Cells stays as Horizontals
Generic scalable cell structure

- Type 1: Governance
- Type 2: Operational

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<th>SMO</th>
<th>Incident</th>
<th>Problem</th>
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<td>HSSI / Security</td>
<td>Release</td>
<td>Capacity</td>
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<tr>
<td>Change Management</td>
<td>Availability</td>
<td>Supplier</td>
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<tr>
<td>DIR / Cherwell</td>
<td>Stakeholder</td>
<td>Service Level</td>
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<td>Central Service Mgmt</td>
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<td>ITSCM / BCM</td>
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Service Management 2020 landscape

Key
- Operational
- Governance
- Horizontal Support

Service
- E-RS
- I&A
- ICT

Management
- GPES
- CQRS
- NHS Mail
- LSP Suppliers
- HSCN/N3

Cell 1
- Spine Core
- SUS

Cell 2
- CIS

Cell 3
- HSSI, Security & CareCert

Cell 4
- Change
- ITSCM/BCM
- Central Service Management
- Service Management Office
- DIR & Cherwell

Cell 5
- Cell 6
- Cell 7
- Cell 9
- Cell 10

GPSoC Suppliers
- EPS Programme/Pharmacy
- LCP Suppliers

Horizonal Support: SUS

Operational: Spine Core, Cell 2, CIS
Governance: Cell 1, Cell 2, Cell 3, Cell 4, Cell 5, Cell 6, Cell 7, Cell 8, Cell 9, Cell 10, HSSI, Security & CareCert, Change, ITSCM/BCM, Central Service Management, Service Management Office, DIR & Cherwell
Horizontal Support: SUS

Suppliers: GPSoC, EPS Programme/Pharmacy, LCP Suppliers

Other Services: GPES, CQRS, NHS Mail, LSP Suppliers, HSCN/N3

Notes: 13
Service Management 2020 successes

- Increased availability of key services
- Removed communications barrier between SM and the Dev teams creating a positive and effective relationship
- Halving Mean Time To Resolution (MTTR)
- Reduction in open incident volumes (in some cases by 50%)
- Reduced incident logging time for clinical staff by over 50%
Successes cont...

• Through proper problem management, reduction in incidents into the service desk (in some cases by 90%)

• Cost savings
  - Same number of staff managing more services

• Improved staff morale & retention

• Improved ability to scale and introduce new services

• Dynamic resourcing